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EAST AND WEST

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New Series, Vol. 13 - Nos. 2-3 - June-September 1962

THE PLANNED AND EXECUTED RESTORATION OF SOME MONUMENTS OF ARCHAEOLOGICAL AND ARTISTIC INTEREST IN AFGHANISTAN

1. *Report on the surveys conducted in 1960 and 1961 in Afghanistan for compilation of an inventory of architectural monuments.*
2. *Preliminary proposals and projects for the restoration and rearrangement of some of the places visited.*
3. *Description of the work of restoring and transforming the Mausoleum of Abdurassha into a Museum at Rauza-i Ghazni.*
4. *Preliminary survey for the restoration project of the Minaret of Jam.*

This is an account of the two trips I made in 1960 and 1961 in Afghanistan, in which I set out, according to my assignment, to make an inventory of the monuments existing in the various regions and to document their state of preservation. This assignment was to be continued, upon my return to Italy, with a re-working of the facts and data collected and a drawing-up of related projects for restoration and preservation. The first practical results of these surveys are represented by a collection of photographic material and of survey drawings made of the various monuments and places visited, in addition to a program for the continuation of the documentary work.

In this preliminary report some of the problems studied — especially the projects regarding the valley of Bamyan — are illustrated, and the results of the initial work of restoration of the Mausoleum of the Sultan Abdurassha at Rauza-i Ghazni, carried out in 1961, and its subsequent transformation into a Museum, are described.

Before beginning the actual reconnaissance which was, according to the itinerary agreed upon with the then Director of the Museum of Kabul, Dr. Ziay, and approved by His Excellency Popal, Afghan Minister of Education, to begin at Kabul and conclude there after going through the northern and southern regions of Afghanistan, I went to Ghazni, the working base of the Italian Archeological Mission.

The particular importance of Ghazni would require a lengthy sojourn there to observe all the monuments of its past and devise the projects necessary for their preservation. The work which the Italian Archeological Mission has now been performing for many years at Ghazni in the field of archaeological research has as its purpose, besides the aim of archaeology proper, the preservation and restoration of the excavated monuments as well.

The procedures adopted for protection of the excavations and the final and permanent reinforcements already executed are a good example of the use of the most modern chemical findings together with the materials of the local tradition.

The aims and practical results obtained in the preservation of the Stupa of Tepé Sardar and of the Palace of Mas^cud III, the two excavation sites of the Italian Mission, have been described and illustrated in a lecture documented by lantern slides, given at the University of Kabul by Prof. Gullini at the end of the 1960 Mission.

At the end of each Mission's campaign, the excavations and materials it has brought to light are consolidated and protected until they can be arranged on a permanent basis at the end of the excavations. This patient and painstaking work makes it possible to preserve invaluable archaeological evidence which, were it not for these necessary precautions, would be irretrievably lost, as has occurred in cases of similar edifices in crude brickwork of which we have preserved, at best, only drawings and photographic records.

It was in the spirit of this principle, chiefly intended to preserve every document of the past, that Prof. Tucci, in keeping with the agreements established with the Ministry of Education of Afghanistan, tried to organize my job of documentation of that nation's heritage of monuments so as to create an archive of data and photographs, as well as projects from which to set up an organic program for their preservation.

The first problem I had to deal with, one which urgently called for solution in view of the monument's condition of extreme decay, was the study of the restoration of the Mausoleum of Sultan Abdurassha at Rauza, a few kilometers from Ghazni and the Italian Mission's excavations, as can be seen from the plan of the area (fig. 1). This restoration has been planned to come within a more general program of urban development planning under which we have devised a road connection with the tomb of Sultan Mahmud which stands in the center of Rauza; at present it is accessible only by a small lane which crosses the town and arrives at the Tomb from one side. The project described (fig. 2) provides for the opening of a road transitable by car, which is to cross the very beautiful wooded area east of the town, so as to come out on the axis of the Tomb, making possible an approach through the garden that lies in front of it.

When the restoration work on Sultan Abdurassha's Mausoleum is completed, (figs. 3-4), it is to be turned into a Museum to house the material of the Islamic period which is at present in storage at a warehouse in Rauza, as well as the wealth of material derived from the Italian Mission's excavations at the nearby Palace of Mas^cud III.

As can be seen on the map plan for the project, this road link is to be the conclusion of an interesting itinerary which will enable the visitor to admire, within the radius of only a few kilometers, the Buddhist stupa of Tepé Sardar which, after Bamyan, is the most important Buddhist monument in Afghanistan; the palace of Mas^cud III and the two splendid minarets of Bahram-Shah and of Mas^cud III, the Tomb of Sultan Mahmud, the picturesque village of Rauza — a green oasis in the midst of the arid plain — and, finally, this new Museum with its important collection of Islamic art works.

The overall project also provides for the building of a small hostel, to be set in a clearing to be made in the wooded area in front of Mahmud's Tomb. Ghazni can be reached by car from Kabul in a few hours, and this will be another reason why it will become, along with Bamyan, one of the great centers of attraction.

During my stay at Ghazni in the second half of July, 1960, I compiled the project for its general arrangement and organization which, as its first step, provided for the demolition of the edifices built on to the Mausoleum (fig. 5). After approving the project, the Afghan Ministry immediately began the demolition work (fig. 6) which was completed at the beginning of this year. Once the restoration projects for this and other monuments and localities to be discussed later, had been presented to His Majesty the King and to the Ministry, the works of consolidation and reinforcement were begun. This is not the occasion for presenting a complete account of the progress and details of this work; the photographs and drawings shown here are a preliminary illustration of the monument which is to be completed at the end of the work now under way.

In fact, the preliminary observations for the work of freeing the points covered by earth or by superstructures were particularly difficult (figs. 7-8).

On August 12, 1961, work was begun, following approval of the projects by the Afghan authorities, who promptly allocated the necessary funds for the work and made the necessary materials and manpower available. After a thorough inspection, it turned out that the structural conditions had deteriorated even further, compared to last year; especially, the entire perimeter of the outer foundation up to the height of about 2 meters from the ground had been destroyed, and at certain points the masonry had been broken away to a depth of about a meter, creating a serious danger of imminent collapse. This can be seen clearly from the photographs (fig. 9). In some parts of the foundation temporary repairs had been made consisting of fillings of loose material not held together by any binding or mortar, and supported only by a thin wall of brickwork (fig. 10). All of this performed no supporting function whatever, so we took measures for the removal of the temporary restorations (figs. 11-12-13), shoring up the parts in danger, and for repair of the fissures and damaged parts by the application of fresh masonry and filling in of the wall. The preliminary work was carried out by sections beginning with the corner tower facing south (figs. 14-15). During the first stage of the preparation for restoration of the wall we also uncovered the foundations underlying the ground floor at an average depth of 50 centimeters.

The tracing of the perimeter of the foundations enabled us to observe the sensible differences existing between the foundation level and the face of the masonry in elevation. This in turn enabled us to determine and then undertake the recomposition of some architectural patterns which could not have been rebuilt otherwise, in view of the complete absence of substructural walling.

The foundations, as I have indicated, formed offsets, jutting out and receding with respect to the foundation wall facing, and at some points these overhangs measured 40 cm. (fig. 16). In the recomposition of the exposed wall facing we adhered constantly and faithfully to the course of these anomalies. This was done in order to maintain that quality of homogeneousness in the building which, even with the existing asymmetrical features, is one of its most outstanding characteristics.

The vagueness of the tracing of the various levels of the outer walls which circle the complex space inside is another characteristic feature of this building, the geometric design of whose plan is, on the contrary, particularly precise (fig. 8). It is probable that in the original builders' intentions the irregularities in execution were to have been covered and disguised by a facing.

The discovery of the foundations also brought to light the four apertures of the crypt which are placed on the orthogonal axes corresponding to the entrance gates to the inside of the Mausoleum. The great crypt extending beneath the entire surface of the Mausoleum follows the division of the rooms of the upper level in its plan. The central chamber covered by the large cupola is executed in the crypt with arches set on large masonry-work pillars, as shown in the section (fig. 17). Of the four entrances to the crypt, two are preceded by a culvert with a sloping surface which continues for several meters beyond the outside of the perimeter and which must formerly have emerged at ground level; at present they are completely buried. All the masonry of the crypt has been left in exposed brickwork and is very well executed, much better than that of all the rest of the building.

In the pavement of consolidated earth, several tombs have been set, including that of the Sultan Abdurassha, to whom the Mausoleum is dedicated. The height of the various rooms is rather low, and, judging by the arches, it was impossible to walk upright. As to the structural part, an inspection of these underground masonry walls was quite satisfactory, and the real problem of consolidation proved to be one of restoration of the masonry between ground level and a height of two meters above it. In the restoration of this foundation part, the characteristics and anomalies of the building have been kept in mind and the work has been carried out in such a way as to respect them. In the choice of the type of mortar, once we had ruled out the original kind consisting of earth mixed with water, for obvious reasons, we finally decided on the use of a cement and calcium mortar which made possible a secure connection between the new and the old parts of the masonry and which, at the end of the restoration of the entire perimeter, formed a continuous hidden beam at the base of the monument, with a great improvement in its stability. The bricks were provided by the brick furnaces of Ghazni and although they were not always identical in the different lots supplied to our construction works, they fitted in well enough with the general characteristics of the masonry (fig. 18), making it possible to distinguish the original part from that rebuilt, without depriving the monument of its homogeneity of pattern and coloring.

The foundation part was completed on September 6th, 1961, except for the northwestern corner which was suspended and finished later, inasmuch as its condition of demolition allowed for easier supplying of the work yard for the restoration of the roof and completion of the drums of the cupolas. From that date work was done on the roof of the Mausoleum.

We began with a preliminary freeing of the cupola drums from the heaps of earth and detritus that covered them, an operation requiring special care and delicacy because of the disastrous mutilations presented by the masonry framework dies on which the cupolas were set (fig. 19).

During this freeing work there emerged, among other things, tracings of the small window openings which were meant to give light to the inner room, corresponding to the four small cupolas adjoining the large cupola and which, probably for structural reasons, had been completely walled up (figs. 20-21) and disguised on the inside with mouldings of coghel (earth and straw paste) mixed into a paste in such a way as not to betray the existence of these openings. We proceeded to reopen them following the tracings we had rediscovered, and they were rebuilt after we had strengthened the masonry dies (fig. 22). This made it possible to increase the lighting inside the building considerably, which is particulary advantageous to its future function as a museum. Besides, the cupolas gain in lightness and airiness and the room again acquires its original atmosphere.

For restoration of the cupolas we took preliminary measures to revive the sustaining function of the thrusts of the masonry dies. This necessary operation will make it possible to go on to the final and permanent restoration of the elements of brickwork and mortar which have deteriorated considerably on the outside due to long exposure to bad weather (fig. 23).

The major problem lies in the central cupola which, as can be clearly seen in the plan drawings and photographs shows a marked variation in its curving at about two meters from the top. The bricks which constitute its final part are almost all split or broken and it is conceivable that they are the same bricks that were recovered from a collapse of the original cupola. A more exact estimate may be formed after the necessary checking and controls have been made on the lower surface of the cupola in the next work season.

In order to complete the restoration of the drums, we covered the horizontal parts with a layer of an average thickness of 5 cm. of cement mortar and aggregate in a ratio of 1:3, shaped so as to eliminate rainwater (figs. 24-25-26). On the roof we also uncovered the structures connecting the four large gates with the arcades of the central body; by means of these probes we were able to observe a construction feature of great interest shown in the sharp separation existing between those gates and the central part of the building, as is shown in the drawings of the plan (fig. 27) in the section of one of them.

This observation leads us to suppose that the construction of the gates represents an addition to the central body and that, although it was provided for in the initial project for the building, the gates were executed at a later stage. To clarify this feature, too, it will be necessary to complete the probes begun in the interior in correspondence with the points of juncture between the two masonry structures (fig. 28).

After these probes we sealed the fissures in the masonry with brickwork covered by a layer of cement and aggregate, thereby preparing a secure base for subsequent waterproofing and final protection.

The thick layer of coghel facing (varying between 10 and 15 cm.) which completely covers the inner walls (figs. 29-30) prevents us from making a direct survey of the critical points at the junctures of the several walls, and the fissures which are noticeable on the surface of this facing are not always indicative of the conditions of the underlying masonry. In fact, this coghel plaster has been repeated several times in a series of layers superimposed on each other, so as to form an entire and perfectly plastered surface, rounding every angle and outcropping and every irregularity in the execution of the masonry. At some points this layer of plaster has been taken off so we could reach the inner structure of the wall; for example, at the base of the great pillar to the north-west (fig. 31) of the central room of the *zjyarat* such a probe was made in order to verify the relation existing between the levels of the crypt wall and those of the building (as was done at the outset of the work on the outside perimeter).

The face of the masonry structure is set back 10 cm. with respect to the outer surface of the coghel facing. This level facing has been obtained not only by the single layer of earth and straw mixed into a paste but also by the superposition of a layer of broken tiles set as a facing 5 cm. thick. The facing of the masonry is, in turn, set back 37 cm. with respect to the pillar of the crypt beneath it.

In relation to the main entrance, the above division was completely disguised by the coghel paste applied on three successive occasions.

In this respect, we should note the use of coghel paste as a plastic and architectural element: it is reinforced by a wooden framework and forms the mouldings of considerable depth to be seen on the interior of the *ziyarat* (fig. 32) which set off the great arches of the central room. The lunettes connecting the central cupola to the square base of the room on which the cupola is set are also made of the same material skillfully plastered and spread. If we consider this coghel as something more than a mere finishing material, as a real building material (which is borne out to this day in the common practice of using it for the agricultural houses in this region of Afghanistan), we may perhaps explain the unconventional irregularities of the masonry and architectural details which ought ordinarily to have functioned as mere supports for this plastic-decorative layer.

In view of the absolute necessity of continuing the work of consolidation so as to be able to leave the monument in condition to withstand a winter without damage, it was decided to postpone a more thorough probing in the interior of the *ziyarat* until the next season. At that time we hope to be able to explain the significance of all these anomalies in construction so as to have a clear picture of the building phases of the monument.

In the same way as described above, on the exterior as well (corresponding to the main entrance) (fig. 33) a series of superimposed layers of coghel alters the architectural distribution of the façade, and, as can be clearly seen, this modification is not confined to a simple cancellation or transformation of mouldings, but radically alters the appearance of the façade, varying the form of its gate and of the small window set above it and covering the entire ornamental panel of the upper part which, on the contrary, can be seen on the other gates. This is shown clearly in the photographs taken before and during work performed (fig. 34).

In keeping with what had been projected, reinforcement and restoration of the masonry work were limited this year to those parts which could be reached without the use of scaffolding, so that the freeing of the upper part of the entrance gate is to be finished in 1962. Therefore, work was done on the main façade to discover the exact outline of the entrance gate and determine the level of the terrace immediately in front of it, which at the outset of the work was not clearly defined because of the many variations made in it.

After removing a first layer of gravel and marble fragments, shown in the photograph, and digging along the perimeter close to the masonry, we found extremely clear traces of what must have been the original floor of the pavement, consisting of a deep offset in the masonry running continuously along three sides. Of the pavement itself not a trace was found; probably it had been cut away and reemployed in the temporary consolidation work, as building material. In fact, fragments of the finely decorated marble slabs which once adorned the palace of Masᶜud III have been found at Ghazni, for example, used as hewn stone elements in stop-gap wall masonry.

On the basis of these traces we went on to the reconstruction of the main entrance floor with brickwork masonry of the same type as that used for the restorations of the foundation. As can be seen in the illustration, an underlayer of gravel and sand was made in the entrance, and on this we placed the brick floor which is to be covered by marble flagstones of the same type as those used for the pavement of the interior. A small stoop cut facing the exterior will make possible an easier connection with the level of the arrangement of the surrounding ground (fig. 27).

The portal has been recomposed according to its original line which is still visible despite the many alterations that have been made in it (fig. 34); it will be provided with an adequate lock.

Another interesting feature is contained in the stairway which connects the ground floor with the roof (fig. 35). In order to clearly perceive its exact course, we freed the last part and the various points where it had been altered by added material.

This stairway consists of a single flight of thirteen steps (fig. 36) and is cut into the thickness of one of the great corner pillars. The fanciful play of small arcs that form the small vaulted landing of the flight lend it a theatrical appearance particularly noticeable to the observer descending from the roof (fig. 37). The asymmetry of the details and the vagueness of execution combine to strengthen this quality of free interpretation of geometrical forms.

Temporary restoration works covered and altered the opening of the stairway on the roof, which corresponded to the entrance where the arch cut in the great pillar (fig. 38), had been reduced by a facing of coghel, and on the first steps near the bottom stones had been superimposed to lessen the slant of the ramp.

At the end of the month of September, after the covering of all the parts which could be damaged by the winter period was completed, the work yard was closed down. It will be reopened at the beginning of the good season. Outside the building, work continued on the setting of the ground according to the projected tracings.

In the present travel report I wished to include these notes concerning a work still in the course of execution in order to show how prompt the Government of Afghanistan has been in welcoming and accepting the proposals and program for the preservation of its national artistic heritage.

My survey of 1961 began on September 5th of that year with my departure from Kabul. I headed northwards aboard a jeep provided by the Museum of Kabul, accompanied by Mr. Kalilloullha Payman, whom I wish to thank here for the assistance he gave me in the inevitable difficulties arising in the course of the journey.

The first stage of the itinerary (fig. 39) was Bamyan.

In view of the importance and fame of this site, I feel that it is particularly suitable as an illustration of the approach I followed in carrying out my assignment. The first drawings and studies drawn up on the basis of the data gathered are intended to serve as a sample of the work executed and that is still in progress here and in the other places I visited.

Whoever travels over the Valley of Bamyan and the other valleys which stretch off from it, from the citadel of Shahr-i Zohhak to Band-i-Amir, finds himself in the midst of a natural setting of extraordinary beauty among the archaeological monuments of the greatest interest and most spectacular effect in Afghanistan.

The observations and plans I was able to make in my necessarily brief stay in the Valley are shown in the drawings illustrating this report. These proposals are to be regarded as the premises for a complete project for the re-ordering and arrangement of the great wall of the Buddhas (fig. 40). The general protective regulations to be applied throughout the valley and especially with regard to the buildings in the vicinity of the Monumental Wall are intended as precautionary guarantees against damages which might result from eventual tourist activities (fig. 41).

The real work of preservation, restoration and arrangement of the monuments is to be set forth in a detailed plan which is to be preceded by a thorough study of the various complexes of grottoes, with the respective measurements and probes necessary for a clear and exact examination of the most serious lesions due to erosion by water and the subsequent disintegration of the rock. This study is to provide the basis for a protective network spreading over the entire front of the wall (fig. 42).

There are already some works of protection and preservation consisting of canals for draining off existing fisuures (figs. 43-44). In the Great Buddha, which are certainly extremely useful in eliminating part of the water, but their function must be reinforced and completed by works of consolidation and by sealing off existing fissures (figs. 43-44). In the interior of the niche of the Great Buddha we can see other measures (fig. 45) taken to mark off the decorated parts so as to arrest their falling away by sealing the perimeter of these areas with calcium mortar (fig. 46). This work, too, should be completed by permanent restoration, whether in the great niche or in the other complexes of the sanctuaries (fig. 47).

The largest work done in more recent times is certainly the enormous buttress for the niche of the Buddha, measuring 35 meters (fig. 48). Apart from the disastrous aesthetic effect of this work, which has seriously changed the appearance of the wall (fig. 49), penetrating far into the interior of the sanctuaries adjoining the niche of the Buddha (figs. 50-51), and which has taken away all grandeur from the statue itself, we believe its structural function is quite questionable.

In fact, the base of this gigantic spur of masonry is not sufficiently broad, so that its effect as a support (for which it was intended) is practically nil. This is proved by the fact that the markers set into the large fissures inside the niche (figs. 52-53) are all broken. I believe the settling sustained by this mass of masonry contributed to intensify the division still further and cause a pivoting of the external part of the wall it was intended to support. It would be advisable to put up new markers for a regular check-up on this work before deciding how to dispose of it.

Apart from these strictly technical considerations, the problem of the Valley of Bamyan should be studied as a "monumental zone" so as to work out the most suitable layout plan for it and set up the necessary restrictions to prevent the building of new edifices in places not in keeping with the whole. The entire valley should be preserved as it is at present, respecting the view and the perspective of the great wall. The school which was recently built (fig. 54) at the foot of the 35-meter Buddha is an example of poor planning which could easily have been avoided if the proper building regulations and restrictions had existed.

The first plate (fig. 41) shows the Valley of Bamyan (taken from a topographical drawing by J. Meunier) indicating the archaeological zones of greatest interest and the ways of reaching them, starting from the high plateau facing the wall of the Buddhas. Also marked, with different tracings, are the new building zone and the zone set off for hotel facilities and residences, that is, the large esplanade lying in front of the wall of the Buddhas which is highly suitable as a position for the construction of a hotel of a shape and size designed to fit in with the surroundings.

The drawing from the head of the 35-meter Buddha (fig. 55) further illustrates the foregoing remarks: in the foreground one can see the new school and in the background the esplanade where the present hotel, which is too massive, stands.

The school built at the feet of the small Buddha does not permit direct access to the Great Statue, and the road marked on the plan of the project reaches the feet of the Buddha obliquely (figs. 56-57-58-59). Should the present school eventually require enlargement, it would have to be built in another place. The bazaar, which stands about a hundred meters from the Great Buddha, as shown in the drawing of the section (fig. 60) of the niche and in the photographs, will not necessarily be crossed to reach the foot of the wall which it will be possible to reach more directly, even though the present path crosses the bazaar. This will make possible a direct comparison of the size of these constructions (fig. 61-62), where the superhuman proportions of the great statues have a special charm and fascination.

The part of the terrain lying between the wall of the Great Buddhas and the sanctuaries, and the road which crosses the bazaar, is entirely flat up to the sheer drop of the precipice and the steep slopes of the wall, and it is in this free surface (fig. 63) area that the opening up of new approaches to the feet of the Great Buddha and the 35-meter Buddha is projected. The present path has many negative aspects; in fact, the necessity of going by a road laid out at an extremely short distance from the wall prevents an adequate view of the wall's different points. In fig. 64 this path is marked by dotted lines; the next plate (fig. 65) shows the modifications suggested.

The tracing of these new roads presents no particular problems. In correspondence with the beginning of the great avenue that leads to the present hotel, the creation of a small piazza is planned, as a point of departure towards the large and the small Buddhas (figs. 66-67). The roads will not be paved, and will be built in such a way as to maintain the feeling of natural paths rather than of deliberate planning.

A complete arrangement ought to allow for an organic way of visiting the great images of the Buddha and all the complexes of the sanctuaries, so as to give the visitor an accurate idea of how the inhabitants of this region, through many centuries of work, succeeded in creating such an extraordinary environment for their religious practices and for their daily life in contact with the Divinity.

At the feet of the Great Buddha the new road is to give on the interior of the caravansary through a breach opening in the wall, so that cars can go in and park there. The space now littered with rubble is to be cleared and arranged in such a way as to provide a better connection with the bazaar and then with the road of Band-i-Amir/Herat. The overall indications marked on the plan of the project will be more clearly defined when execution of the work is underway and all the necessary measurements and probes have been completed.

The drawing from the head of the Great Buddha (fig. 68) shows in perspective the whole of the arrangements and lay-out described above.

The drawing shown in fig. 69 is a study for the possible setting up of a small underground museum at the feet of the Great Buddha (fig. 70), exploiting the existing differences in levels, and with a small staircase leading to the small raised piazza. Such a structure would in no way alter the present appearance of the wall, and the views of the Buddha would gain in interest when seen by persons mounting the stairway leading to his feet. I believe that the collection of museum documentation of the history and art of the Buddhist period of Bamyan here could guide to visitor toward an understanding of the spirituality and life which has throbbed in this Valley for centuries (fig. 71).

In one of the valleys which lead off from the Valley of Bamyan toward the south (figs. 72-73), called Valley of Kakhrak, stands a statue of the Buddha 7.6 meters high, set into a niche 7.4 meters deep and 5.5 meters wide (fig. 74) and surrounded by several grottoes and sanctuaries.

On the left as you look at the figure, there is an entrance opening on a small octagonal cell 2.3 meters in diameter and 2.65 meters high on the inside. In the center of the vault one may still perceive traces of the ancient decoration in red and blue colors on plaster.

The figure of the Buddha is badly damaged by atmospheric effects and man-made injuries; the face hardly emerges in relief any more and, except for a trace of drapery on the shoulders in modelled stucco and a few other traces of stucco on the background of the niche, there is nothing left of the decorations. The forearms are both broken off at the elbow and only the holes they had been set in remain. A narrow culvert 1.7 meters high runs behind the Buddha's feet (fig. 75).

The figure, ruined as it is, nevertheless retains remarkable suggestiveness, further enhanced by the particular perspective in which it is perceived as one approaches it from the steep bank on which it looks out (fig. 76). The general condition of this work and the problem of its preservation are highly critical, due to the scarce solidity of the overhanging mountain wall. In fact, the niche of the Buddha forms a spur, so to speak, in the slope, at the sides of which there have formed, due to constant washing away by rainwater and snow, two real landslide cones which extend all the way down to the river banks (fig. 76). The same may be said of the parts of the slope at the foot of the niche, likewise turned into a precipitous sheer drop of crumbling earth and rocks.

For all these reasons, both the upper part of the niche and the cleared platform before it have suffered serious damage and seem condemned to gradual destruction. This report is not intended to set forth detailed proposals for its preservation. As can be seen in the drawings of the plan and section of the Buddha, it would be necessary to carry out works for halting the landslides which have a slant of about 45°, to prevent the total disappearance of this important monument. The halting of the landslide movements and a canalization of the waters coming from the higher part of the mountain are the preliminary operations, which would have to be followed by the consolidation and restoration of the monument itself.

To the west of the Valley of Kakhrak and almost parallel to it stretches another valley called Foladi, where other complexes of Buddhist grottoes of great interest are to be found (of which I made drawings that are being completed). The visit to this valley completes the panorama of the Buddhist period of Bamyan (figs. 77-78-79).

Leaving the Valley of Bamyan on September 10th and heading north, I took the road that leads to Pul-i-Kumri, crossing deep gorges between sheer cliffs broken occasionally by openings giving onto very beautiful views of the mountains.

Along this road, which is very fine to travel by, there are many ruins of ancient castles, most of them built in crude brickwork and always set in strategic positions for the defense of the valley (figs. 80-81). They represent an extremely interesting building complex.

Starting out from Pul-i-Kumri on the following day, I continued the journey going through Surkh-Kotal, Haibak, and Tashkurgan, as far as Mazar-i-Sharif. Each of these places has monuments of special interest. The great building of Surkh-Kotal is an imposing monument which, being almost entirely built in crude brickwork, is unfortunately rapidly being destroyed; on the contrary, the stupa that stands near Haibak, hewn out of the rock face by extraordinary and daring digging and carving, is sure to defy centuries without suffering damage. At Tashkurgan I visited the covered bazaar, made up of a central part in stonework from which several side streets and lanes of the bazaar run off, covered by wooden structures; some of them contain exquisite woodwork and finishing, and are probably derived from older buildings and re-employed here (fig. 82). The part built in masonry, in particular, needs restoration work and the entire covered bazaar, which is certainly one of the most interesting in Afghanistan, should be preserved as it is at present by means of consolidation and reinforcement of the shaky parts. Still at Tushkurgan, the Mosque too needs restoration work on its interior decorations which have recently been covered with a layer of coghel and calcium plaster.

The complex of the bazaar and the Mosque will be the subject of special detailed surveys and projects for their preservation under the work program for the coming years.

On September 12th, I reached Mazar-i-Sherif. The city is in the midst of a modernizing building boom; many buildings and new roads being traced will change its present appearance within a few years. The most important monument, which stands in the center of the city, is the famous mosque of Ali, completely faced all over its surface by tiles colored in various shades of blue. At present work for the enlargement and repair of the square and streets surrounding it is under way.

As the city of Balkh is quite near Mazar-i-Sharif, I was able to visit it in one day and return to Mazar the same evening.

I feel that the real problems of Balkh lie within the field of archaeology proper. What is left of the ancient city of Balkh is a tragic example of man's destructive power. One has the impression there of being confronted by the consequences of some terrible scourge inflicted by nature. At a distance of some centuries from the destruction that occurred there, not a sign of life remains to reveal even a sporadic survival of human beings. The deep furrow dug by French archaeologists in what must have been the center of the ancient citadel appears as an impressive attempt at research for some trace of past life, and the layer of ashes which can be seen at a depth of many meters is certainly one of the most dramatic evidences an archaeologist can come upon. Naturally, this whole zone of the ancient city represents a vast field for archaeological research, and must be preserved and protected for that purpose.

The Islamic monuments of Balkh have been photographed, and I have made some observations and measurements which should be completed in other on-the-spot surveys. The complex of buildings formed by the Mosque and by the remains of the Madrasah of Sayyed Subha Kuli Khan (fig. 83) should be preserved as they are now, separated by the present garden in which no other structures should be built.

After the return to Mazar-i-Sharif following the survey at Balkh, and after taking leave of the governor who, here as in every other place I visited, did the utmost to facilitate every need connected with my mission, I resumed the journey, going in the direction of Aqcha through the desolate strip of desert which stretches unbroken all the way to the border of the U.S.S.R.

Aqcha is a long series of bazaars rising on both sides of the caravan route to form one great market of rugs and astrakhan hides, and is extremely interesting to see on market days. Continuing through Aqcha to the west, I reached Shibaghan the same day and from there, by a deviation to the south, I headed towards Sar-i-Pol. Along the stretch of road leading from Shibaghan to Sar-i-Pol one can see many burial mounds (tumuli) by the roadside which are certainly very ancient and could be the object of an archaeological investigation.

Beyond Sar-i-Pol, according to information that had reached the functionaries of the local administration, there is supposed to be a great statue hewn from the cliff face, resembling those existing at Bamyan. A long trip made on horseback through the heights surrounding the town, however, proved entirely fruitless, and the guide who was leading me was unable to provide sufficient indications for reaching this hypothetical place which, as I later learned, no one had ever actually seen.

Returning northward, again passing Shibaghan, I reached Andqui on September 15th. This town also shows characteristics in common with Aqcha: the astrakhan trade is flourishing in the crowded covered bazaar. The road going to Maimana is certainly one of the roughest anyone could possibly travel.

The city of Maimana, surrounded by an endless series of rounded hills, appears with the regular geometry of its streets which branch out from the acropolis that stands at the center of the city. The monumental part of the city is of no special importance, nor does it present any special problems of repair or arrangement. Here too there are many new buildings and works for the repair of the old bazaar. The enlargement of the city follows the lay-out of the streets which, as I have said, branch out in a ray-pattern from the center towards the periphery.

In a single 18-hour lap of travel I reached the city of Herat on September 17th.

A deviation of the route near Bala Murghab enabled me to visit the *ziyarat* of Asobe' Kaf, accompanied by a nomad who knew the way to get there. This *ziyarat* is very well known and much visited because of the ancient legend which attributed supernatural powers to the mortal remains of the persons buried there. The *ziyarat* is hewn from the rock of the mountain which one enters through a narrow passage (fig. 84), and the room where the bodies are placed is some ten meters above the entrance level, also hewn out of the rock and weakly lit from above through an opening dug out of the mountain.

Late in the evening we reached the center of Herat, going through the great avenues which form the road network of the new enlargement. The interest and fascination of this city is apparent instantly at the first visit to its ancient center and grandiose architectural monuments.

I wish to suggest here that attention be given to the problem of the preservation of the monuments which stand in the centers of the ancient cities of Afghanistan, and of their integration within the new surrounding structures that are springing up with the rapid development of building which has been especially intense in the last two years and is sure to increase at quite a swift rate in the years to come. At Kabul, Qandahar, Mazar-i-Sharif and Herat this problem is particularly urgent, and the drawing up of an organic plan for safeguarding the monuments and localities of special interest has already been discussed with the Afghan authorities.

Herat, for example, is a city undergoing complete modernization; new streets, new public administrative buildings and private buildings are being constructed. A town planning program going back some decades has been enacted with regard to the road network, new city zones have been traced; in many of these lots formed by the new tree-lined avenues, the buildings have not yet been built. but the city has already taken on a new appearance of its own, sharply contrasting with the ancient basic plan of the town. The old city, its bazaars and its monuments, remains marginal to this modernization and many structures of special interest are fated to disappear unless plans for their preservation are provided.

At Herat, in the zone of the former mosque of Amir Ali Sher Navai (figs. 85-86), four minarets are still standing, which appear to be in very bad condition and which, as can be seen in the photographs and in the plan drawing, are close to total destruction.

According to what I learned from Prof. Seldjouki, a local scholar, along with other information which was very useful for drawings and observations I made at Herat, in this zone in the vicinity of the mosque there used to stand a school, a health sanitarium and a literary academy. These buildings were completely destroyed towards the end of the Nineteenth Century, and only the chapel of Goo-har Shad and nine bases of the minarets remained; in recent years, three of the latter have been destroyed and there remain six still standing.

The plan shows the four which formed an intrinsic part of the mosque (fig. 87).

I suggest a plan for a road layout of this zone which would permit a connection with the Mosque known under the name of Dome Bleu and the other two minarets which are now isolated in a recently formed garden (figs. 88-89). The state of preservation of the minarets is rather bad, and the surrounding terrain on which the mosque stood is completely disordered and littered by the collapse and destruction that have occurred (figs. 90, 91, 92, 93). Some canals cross and surround this area on which the surviving minarets stand. In the preliminary plan for its reordering and arrangement a deviation of these water courses is foreseen. Furthermore, this zone of Herat should be connected to the city and to the nearby minarets (fig. 94) and the Dome Bleu (fig. 95) by a green zone which would restore this monumental complex to the dignity and importance it had in the past.

There are many other problems of considerable interest at Herat; among them I recall the ancient portal in the mosque of Masjidi-Jamih (fig. 96) now closed due to the reconstruction work on the new Mosque, and which should be preserved and restored, and the inside portal of the same Mosque with its beautiful ornamentation in bricks and the writing in Kuphic characters on it (figs. 97, 98, 99, 100).

In the immediate vicinity of Herat is the holy city of Gozargah, famous throughout Afghanistan, the goal of pilgrimages and refuge of many blind and sick vagrants, as well as the burial place of some kings of Afghanistan. This monumental complex, rich in valuable architectural works, will form the subject of a special study when the surveys and drawings are completed. The photographic documentation I have collected of this complex and of many isolated structures (fig. 101-102) has been arranged to constitute the basis of the archive which will be the first practical result of this documentary work.

The itinerary which I was to follow to Fhara, Qandahar, Ghazni, ending at Kabul, had to be changed because of unforeseen circumstances which prevented travelling by the stretch of road between Fhara and Qandahar. After staying a few days at Herat, in hope that the road to Qandahar might be reopened, I decided to return to Kabul by the central road of Hazarajat, after ruling out the possibility of return by air. Although very uncomfortable to travel by, this road enabled me to see the locality of Khajeh-Chasht and the buildings of the Ghoridic era that stand there. An on-the-spot survey at the minaret of Jam was impossible, in view of the limited amount of gasoline taken on board the jeep and of the fact that I had to reach Bamyan without the possibility of refueling. This variation in the itinerary enabled me to return to Bamyan to complete some measurements which I had been unable to make during my first stay in the Valley.

The journey ended at Kabul on September 28th, 1960.

In the survey mission I carried out in 1961, at the end of the work at Rauza described above, I travelled through the southern regions of Afghanistan through Qandahar, Lahkari, Bazaar, Fhara and Herat, to reach the minaret of Jam.

In the course of this second itinerary, in view of the limited time available, I proceeded to make a documentation of the most well-known monuments, putting of a more thorough investigation of problems regarding other localities to a later on-the-spot survey. The goal of the present survey was, as I have mentioned, the minaret of Jam. At the invitation of the directorship of the Museum of Kabul, I went to Jam to verify the structural conditions of this extraordinary monument, since, according to the information given Dr. Mutamedi, the present director of the Museum of Kabul, they had been termed precarious.

I shall not dwell on a description of the difficulties encountered in reaching this place, enclosed by high mountains which few local people are able to reach without difficulty. All this is very well described in the report made by Prof. A. Maricq, who has won credit for being the first to have discovered this monument in 1959. I will only add that the difficulty of approaching this minaret is amply rewarded by the superb view to be had on reaching it across the narrow valley (fig. 103), coming from the village of Jam.

From that on-the-spot survey I was able to note the following: this bold structure, about 60 meters in height, is set at a short distance from the crossing point of two water courses, the main one, the Hari-rud, running from east to west and the other, torrential in character, from south to north.

The base part of the minaret, which is octagonal in design up to about four meters from ground level, is badly ruined; the ornamental wall facing has fallen away to a considerable extent all around the base, as is illustrated in the observation drawing and can be seen particularly well in the photographs. On this octagonal base an initial cylindrical trunk is set, followed by two others of lesser diameter ending in a windowed lantern without a top. The balconies which used to connect the different trunks have been destroyed and one can see the masonry cantilevers on which they once rested.

One can get to the inside of the minaret through an opening above the octagonal drum of the northern façade. A system of spiral stairways, all winding around a single stonework cylinder, leads to the first balcony. At this point the stairway turns into a series of short flights attached to the inner wall of the second trunk, connected by landings made of light vaults in brick. At the end of the second trunk the stairway ends altogether, and one may see the sky through a final small perforated loge or enclosure. Due to a collapse that had occurred at the base of the spiral stairway inside the octagonal part, I was prevented from checking what the Governor of Shahrak (on which the village of Jam depends administratively) told me, that is, the possible existence of an underground passage beneath the river linking the Minaret with the Castle standing on the mountain wall on the opposite side of the river.

The vertical axis of the Minaret shows a marked slant, undoubtedly due to several causes. A series of probes should be made in the substructure of the Minaret, so as to ascertain the exact state of solidity of the foundations and the possible damages caused by erosion from water in the zone on which the building load is concentrated. A check on the levels of the water courses during the different seasons is also extremely important to the project for reinforcement work. Local people have assured me that in the month of April the level increases by three meters compared to the present level, observed at the beginning of October and indicated on the section shown in the drawing (fig. 103).

A complete survey of the Minaret will enable me then to draw up a specific project for setting up a work yard and scaffolding, and deciding on materials and work methods to be employed. By agreement with the directorship of the Museum of Kabul and at the suggestion of its Director, Dr. Mutamedi, a storehouse deposit of the materials necessary for the restorations is to be set up at Sharak, and they will be transported from there to the base of the Minaret as work proceeds.

The program for the coming year covers the preliminary part of these operations: observation, drawings, measurements and probes, in addition to providing the supply of materials on the spot. We may also begin the quarrying of stones which it may be advisable to use in future works for the consolidation and reinforcement of the terrain surrounding the base of the Minaret and for the formation of an embankment for the purpose of deviating the force of the waters from the Minaret base.

A detailed program on the conduct of these works is now under study; it must be particularly close and careful because of the logistic difficulties involved, which will undoubtedly be decisive in the programming of the work to be carried out for the preservation of the monument, and in drawing up a financial plan regarding this task.

On October 5th, 1961, I ended my second itinerary through Afghanistan at Kabul. The documentary material I gathered during this journey is being compiled and classified, and will be used as a basis of studies for the future course and conduct of the works undertaken.

Andrea Bruno

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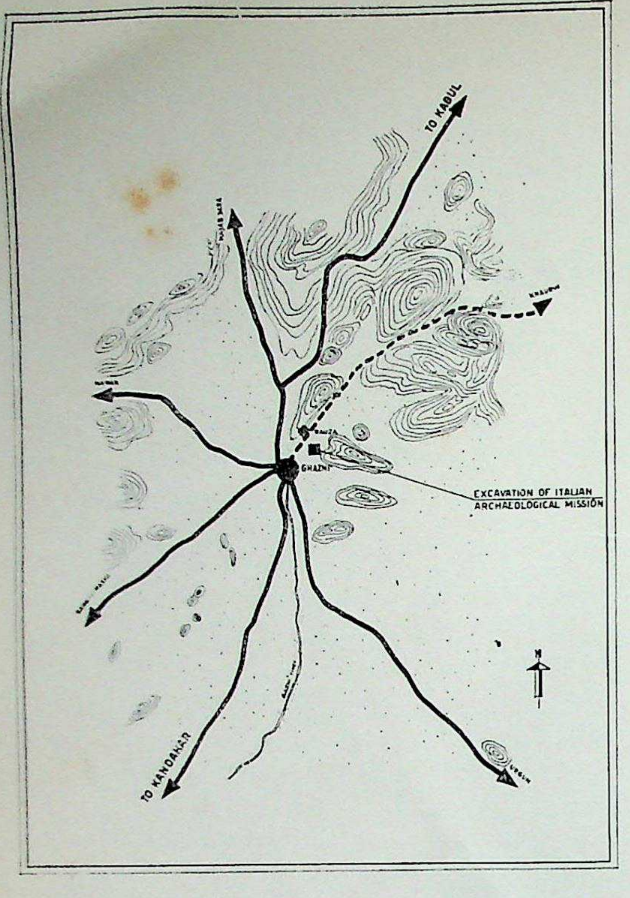
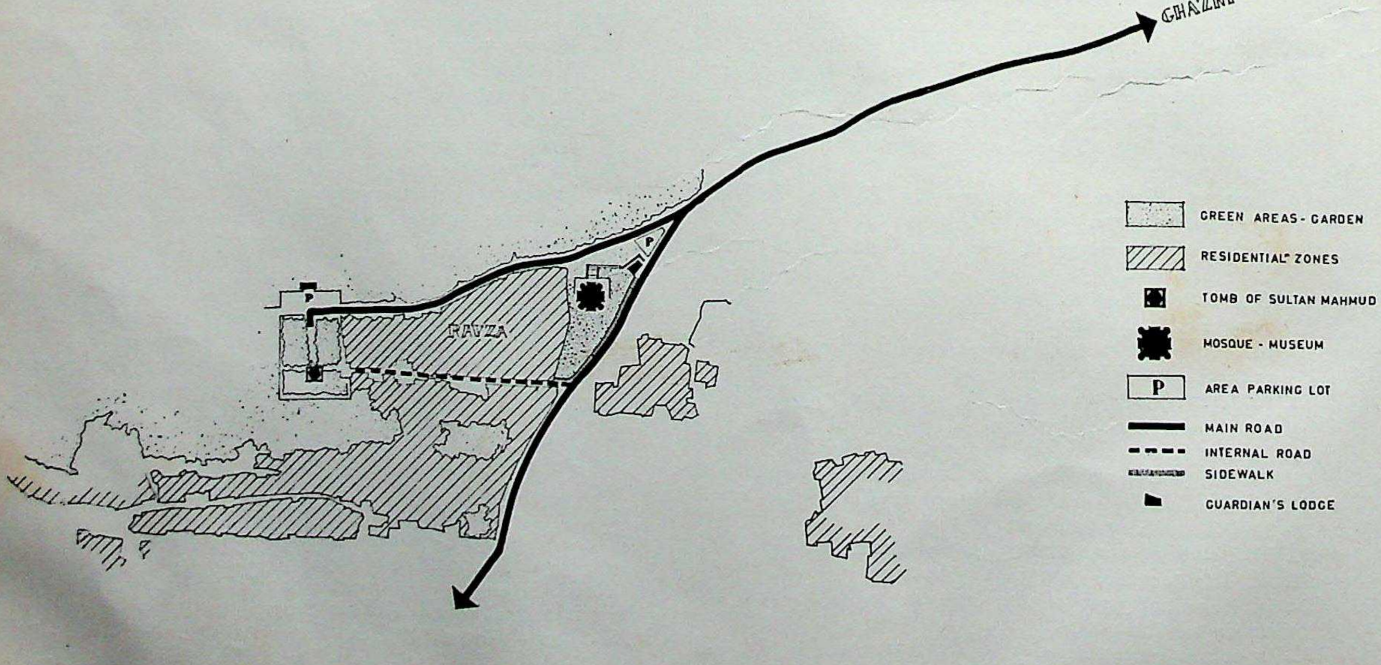
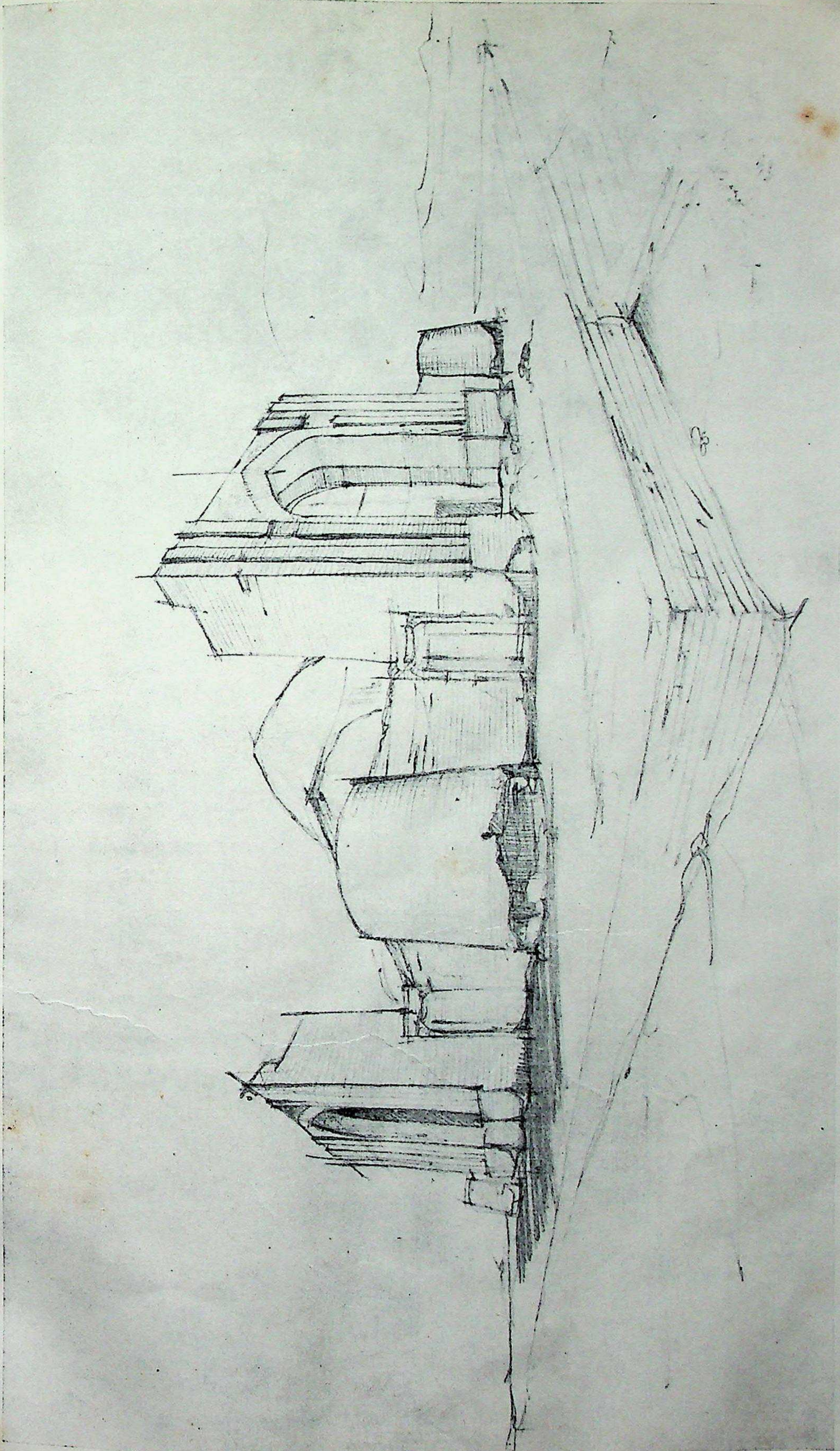

TO KABUL
RAWZA
GHAZNI
EXCAVATION OF ITALIAN ARCHAEOLOGICAL MISSION
N
TO KANDAHAR
URGUN

Fig. 2.


GHAZNI
RAVZA
P
P
GREEN AREAS - GARDEN
RESIDENTIAL ZONES
TOMB OF SULTAN MAHMUD
MOSQUE - MUSEUM
P AREA PARKING LOT
MAIN ROAD
INTERNAL ROAD
SIDEWALK
GUARDIAN'S LODGE



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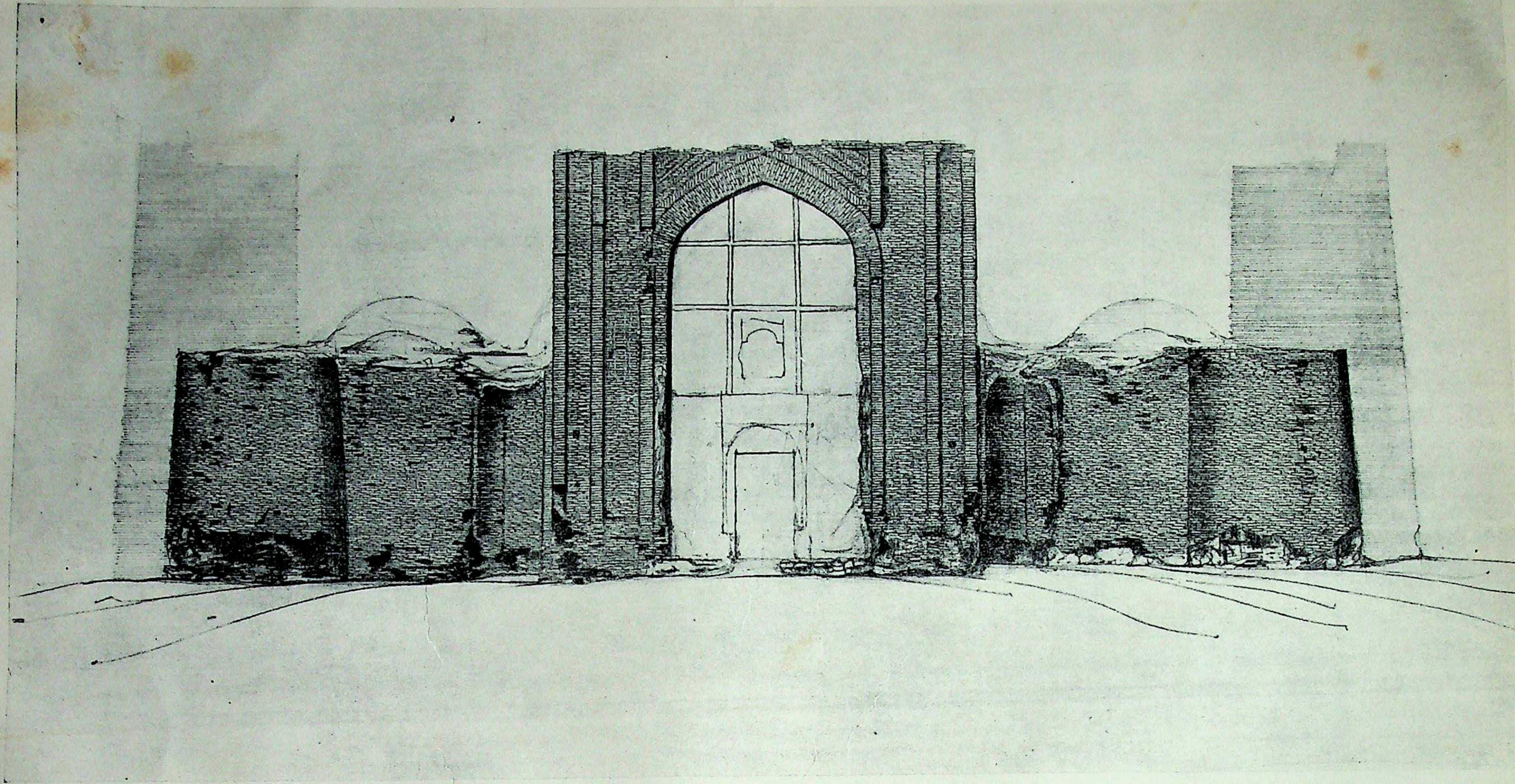

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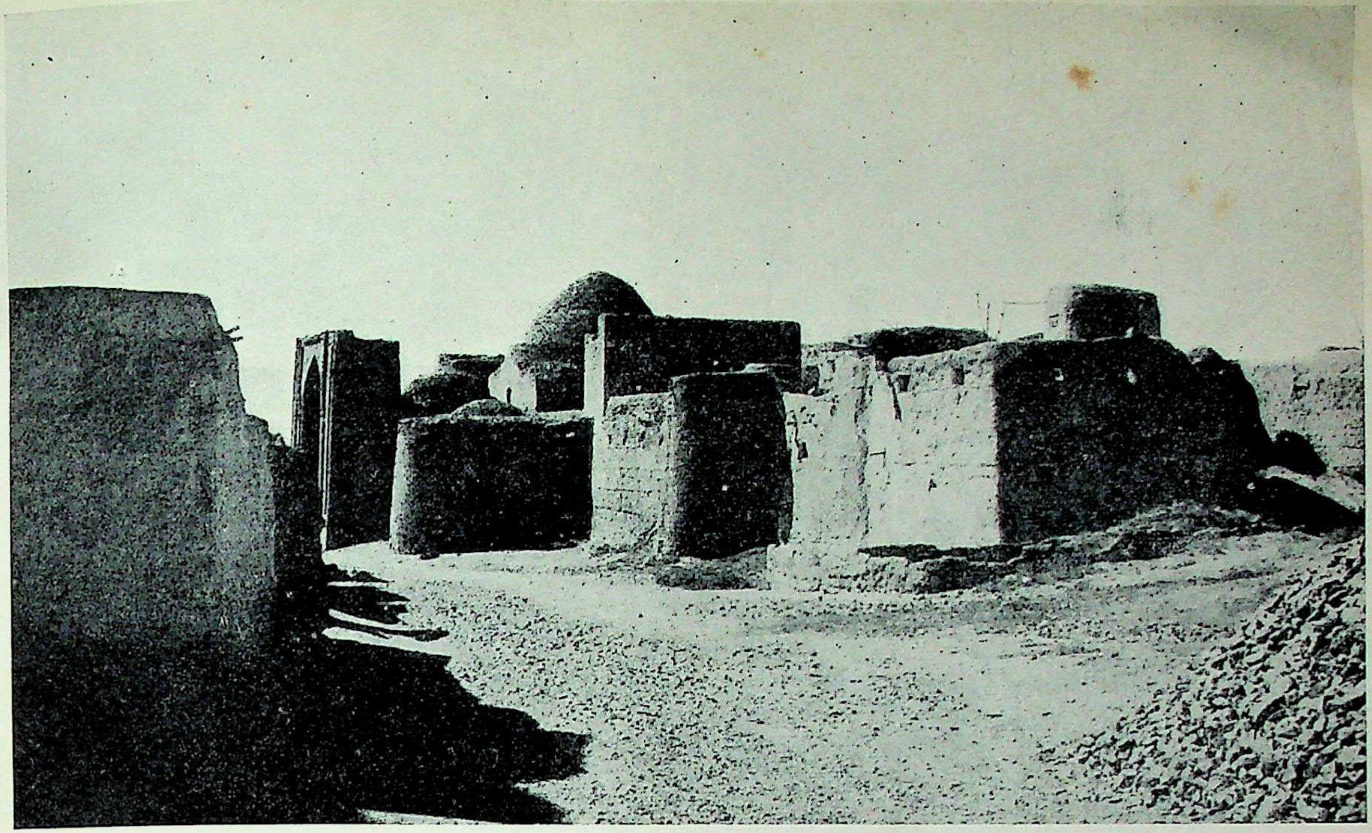
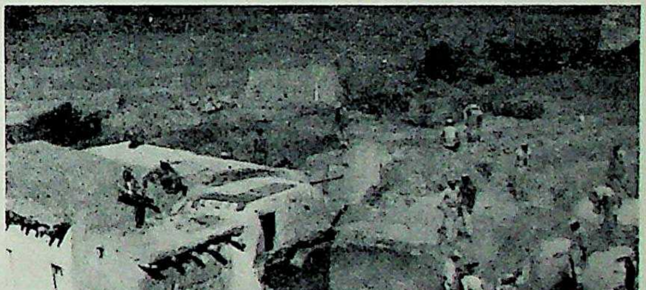


Fig. 5.



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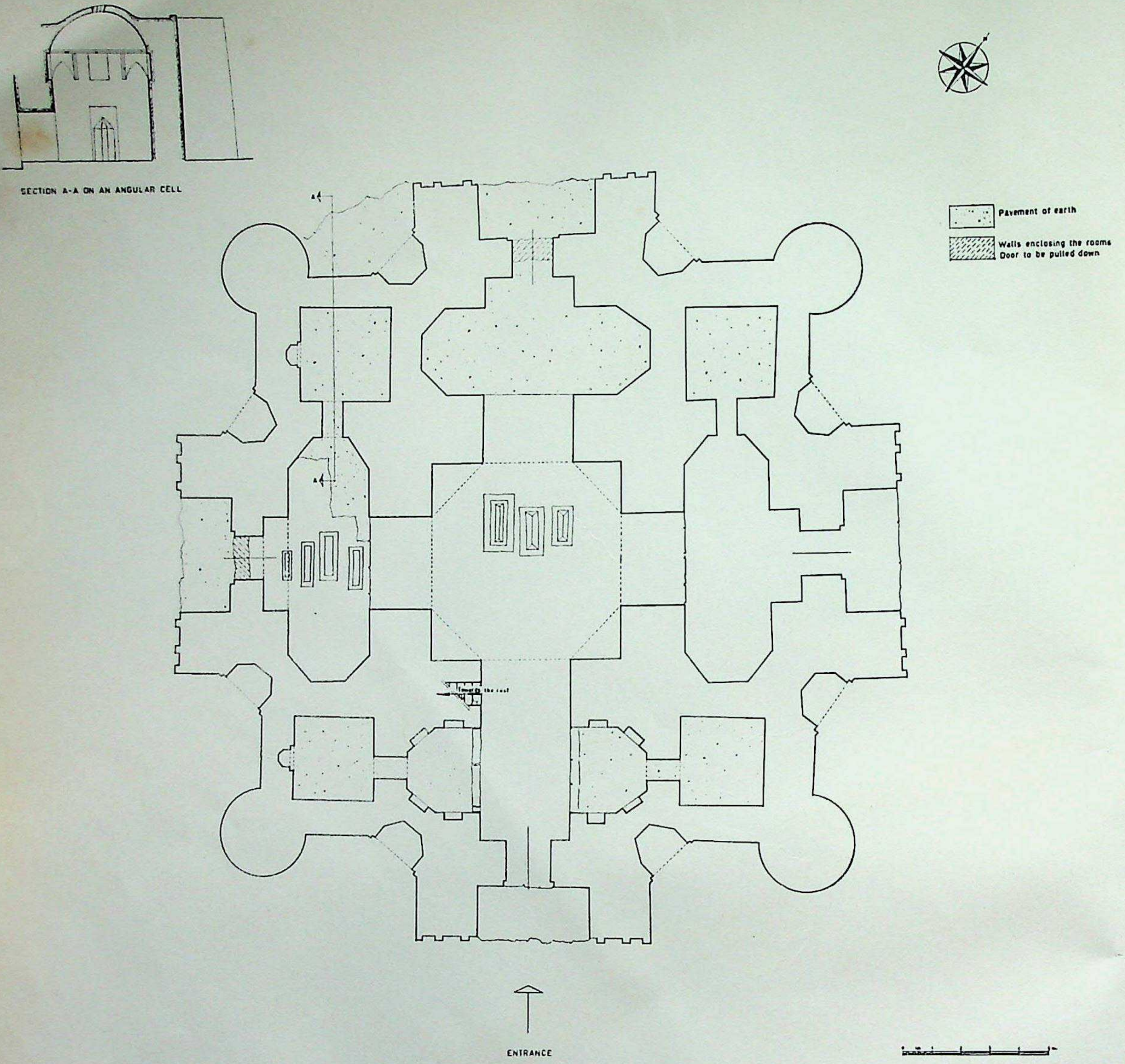

SECTION A-A ON AN ANGULAR CELL
A
A
▒ Pavement of earth
▨ Walls enclosing the rooms
Door to be pulled down
towards the roof
ENTRANCE

Fig. 7.

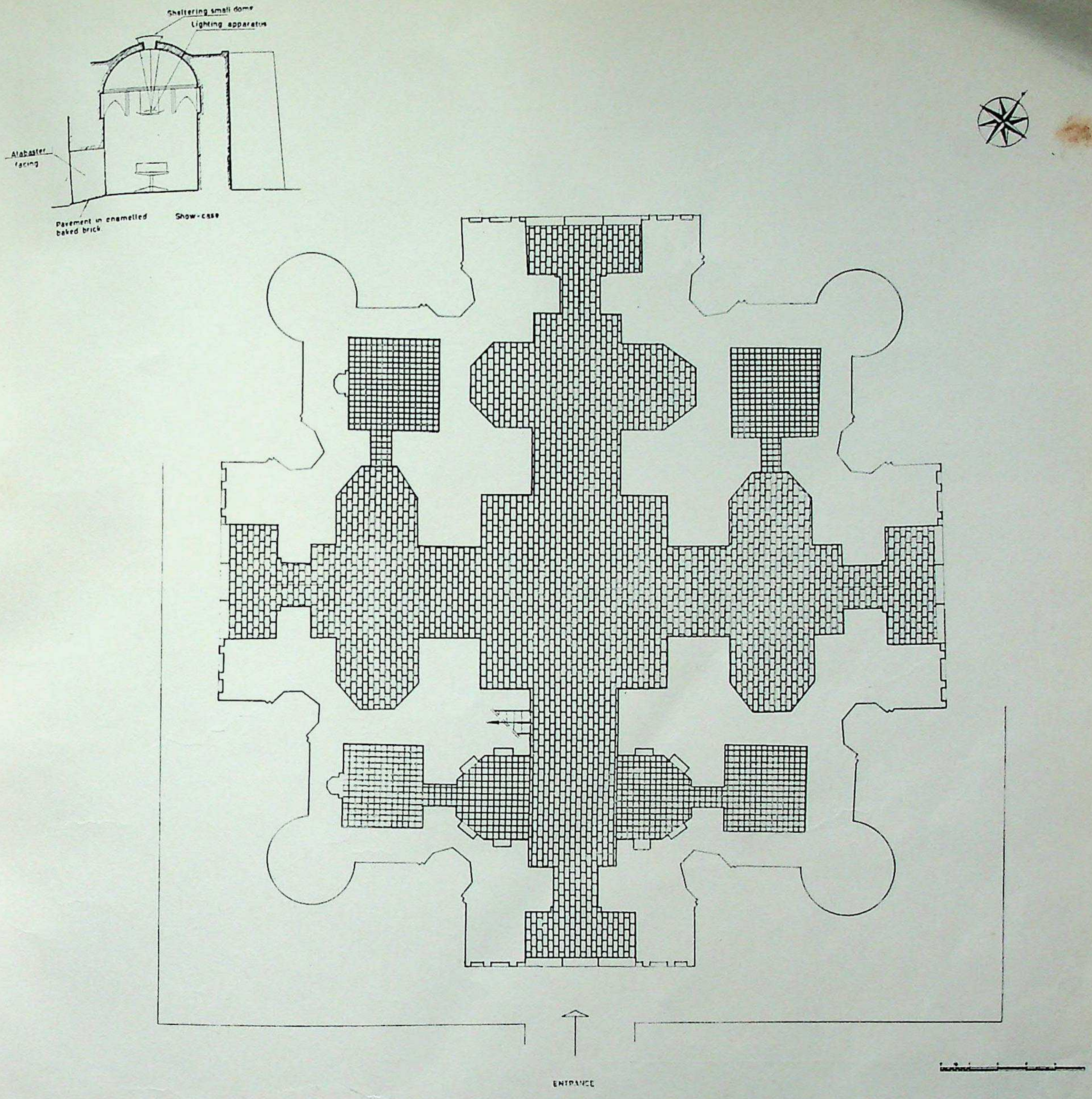
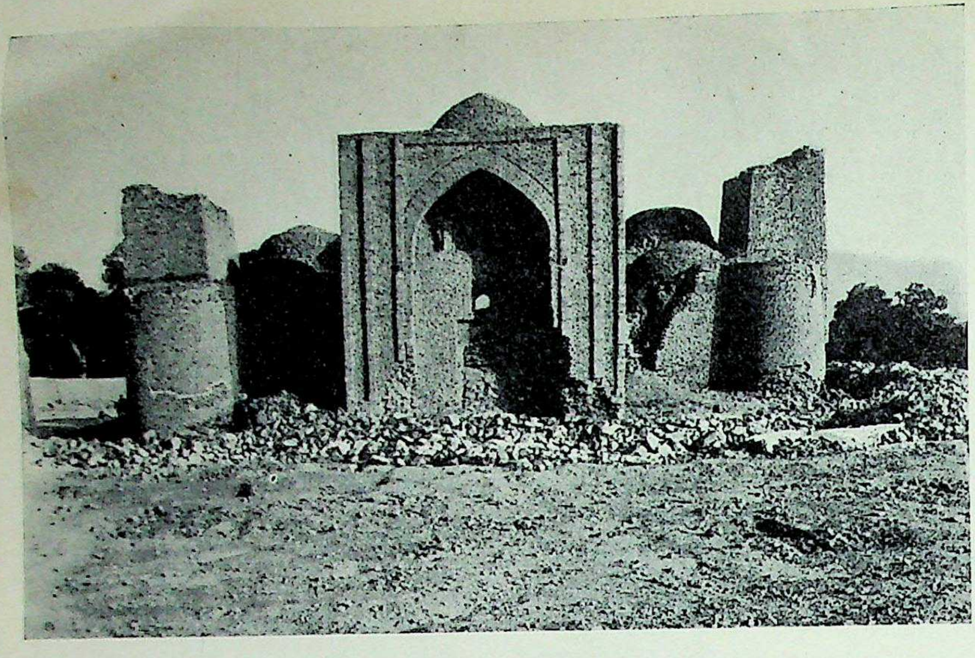

Sheltering small dome
Lighting apparatus
Alabaster facing
Pavement in enamelled baked brick
Show-case
ENTRANCE

Fig. 8.

Fig. 9.



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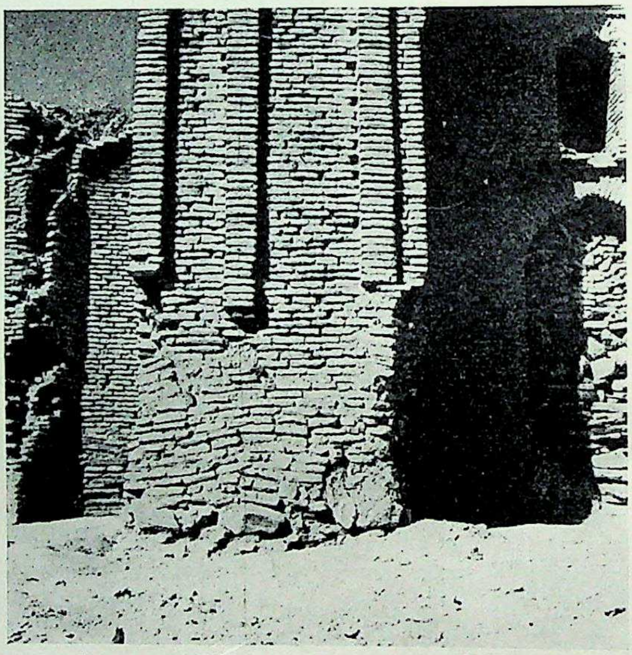

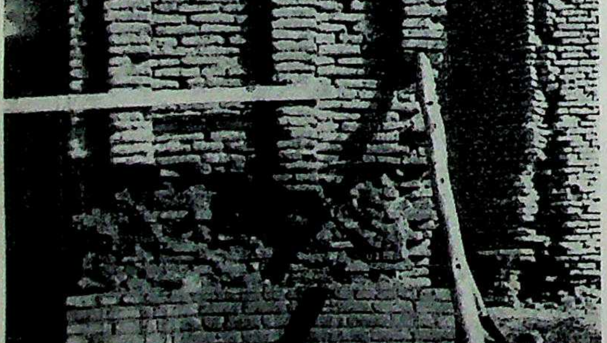

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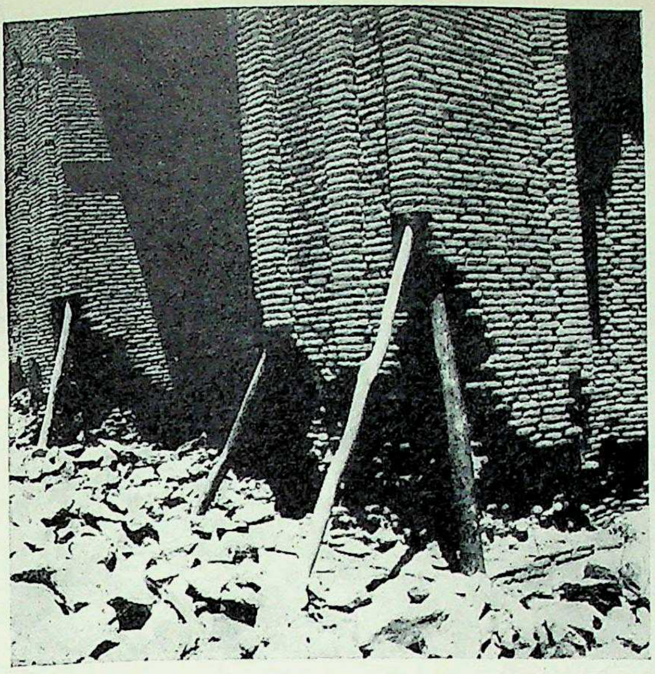

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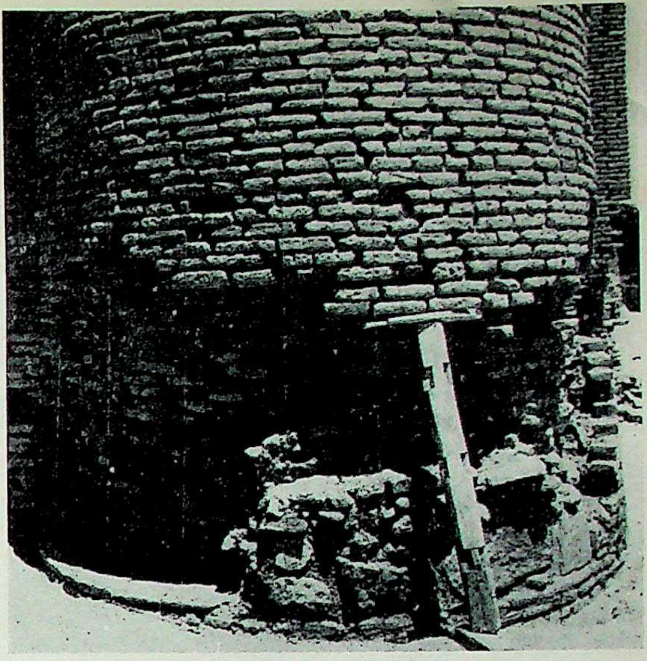
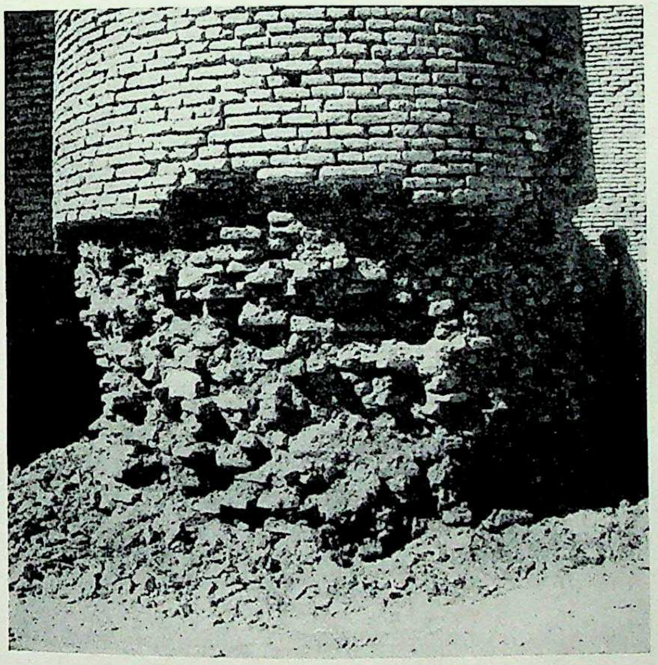
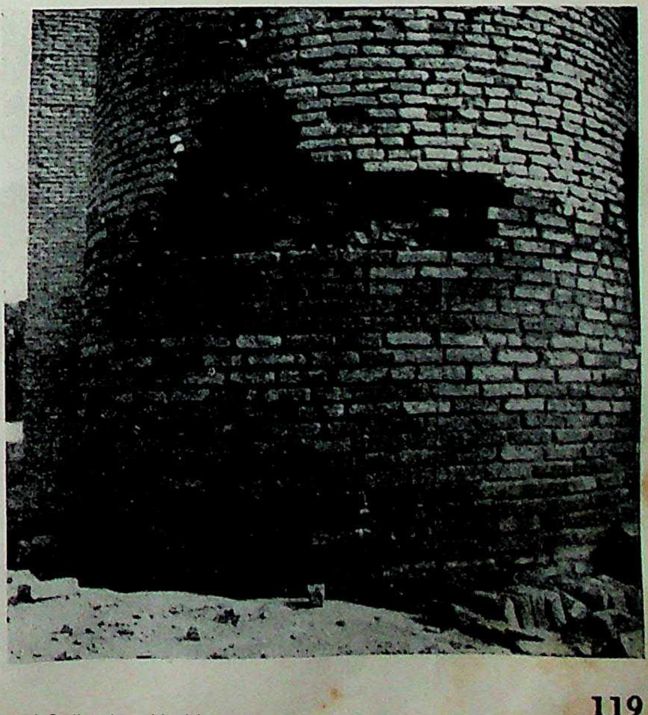


Fig. 13.

Fig. 14.





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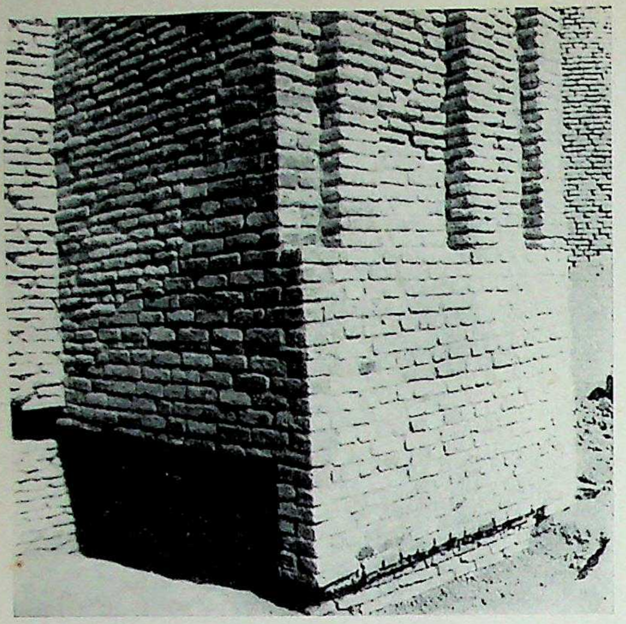

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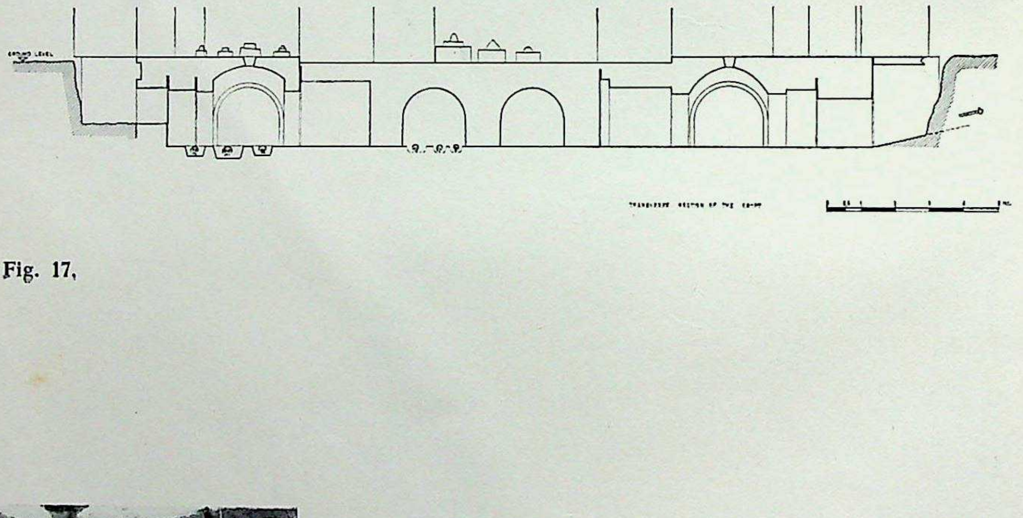


GROUND LEVEL

Fig. 17.

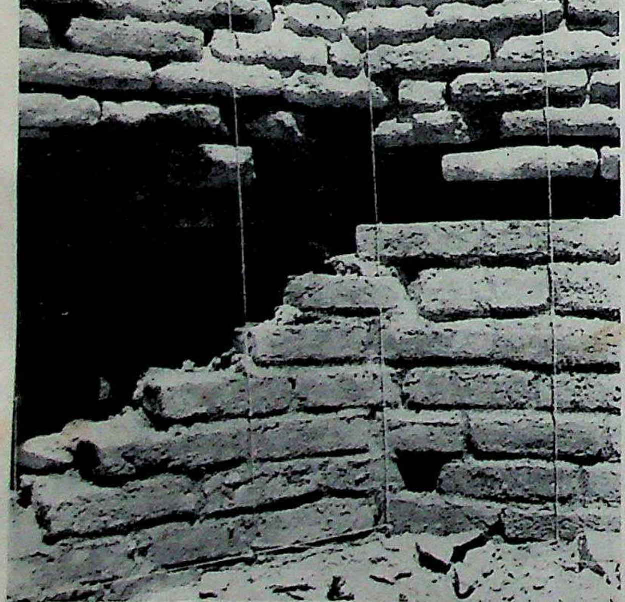
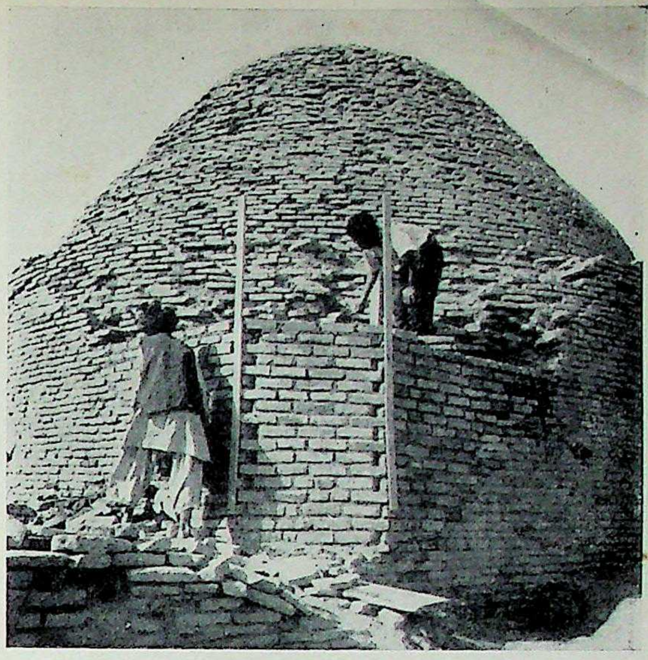


Fig. 18.

Fig. 19.



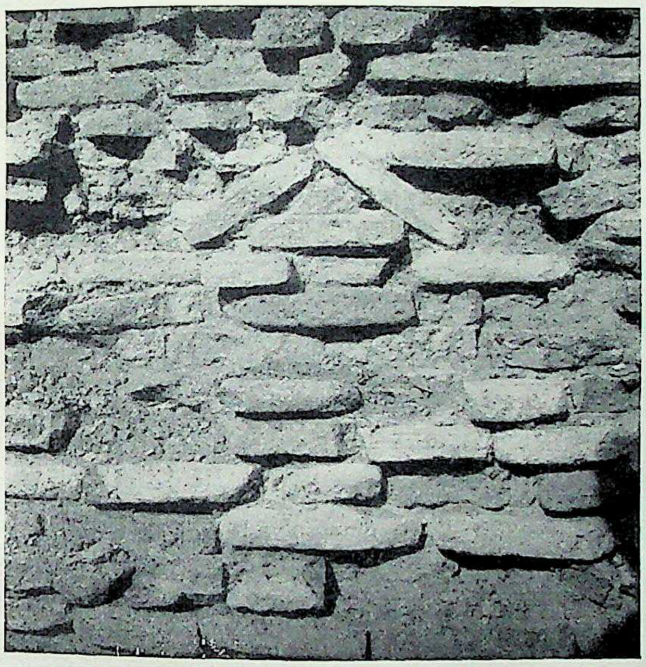


Fig. 20.

पुस्तकालय
077776
गुरुकुल कांगड़ी विश्वविद्यालय हरिद्वार

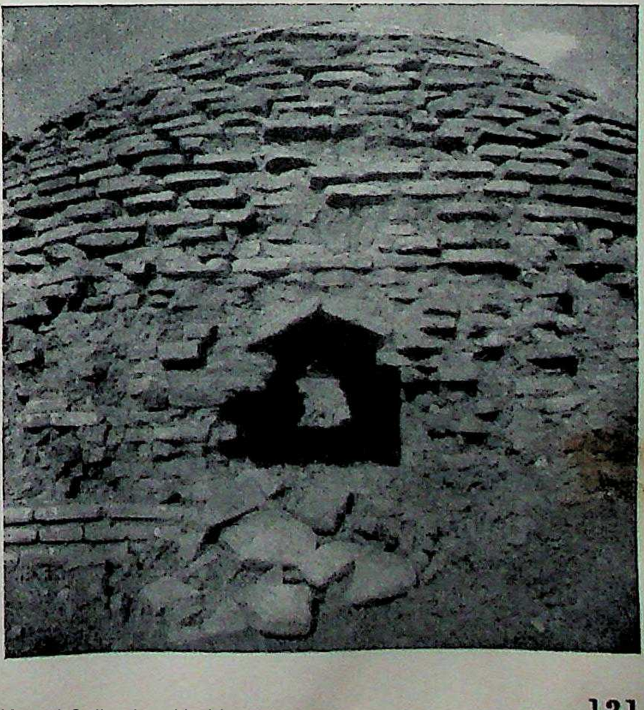


Fig. 21.

Fig. 22.

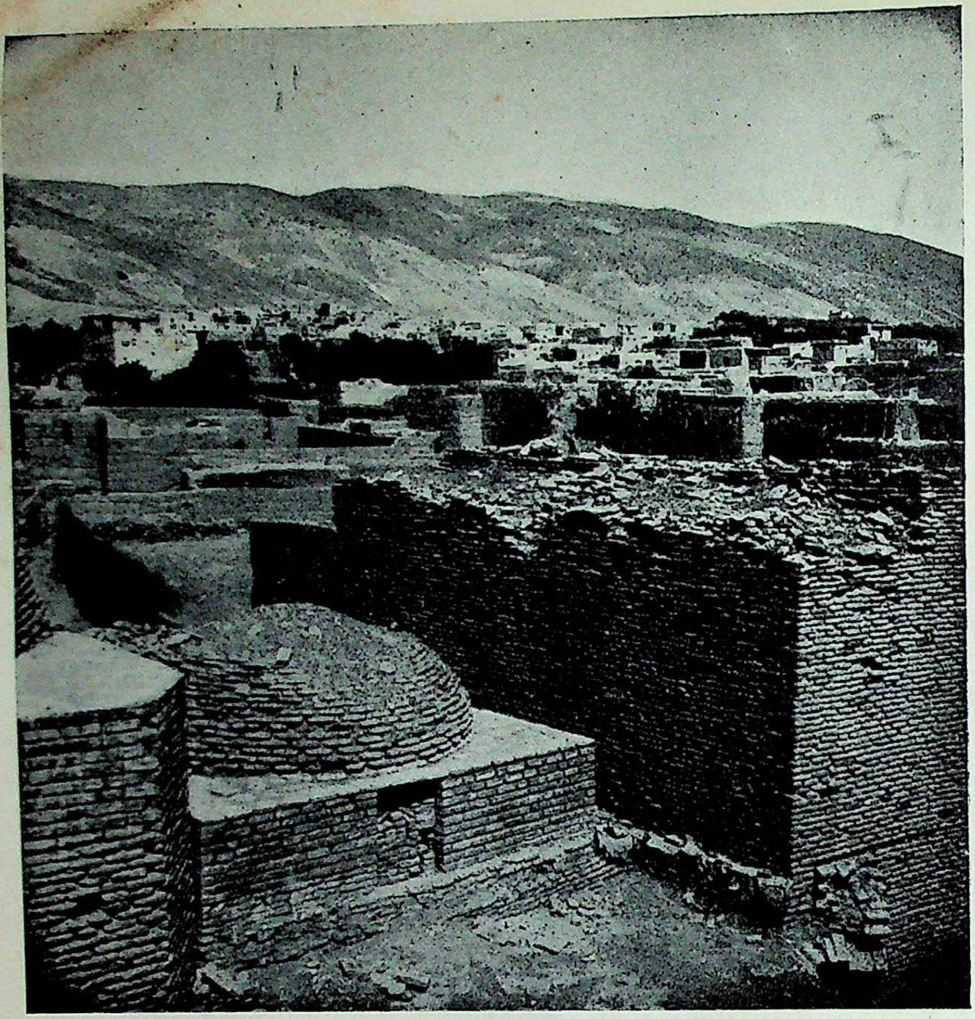


Fig. 23.

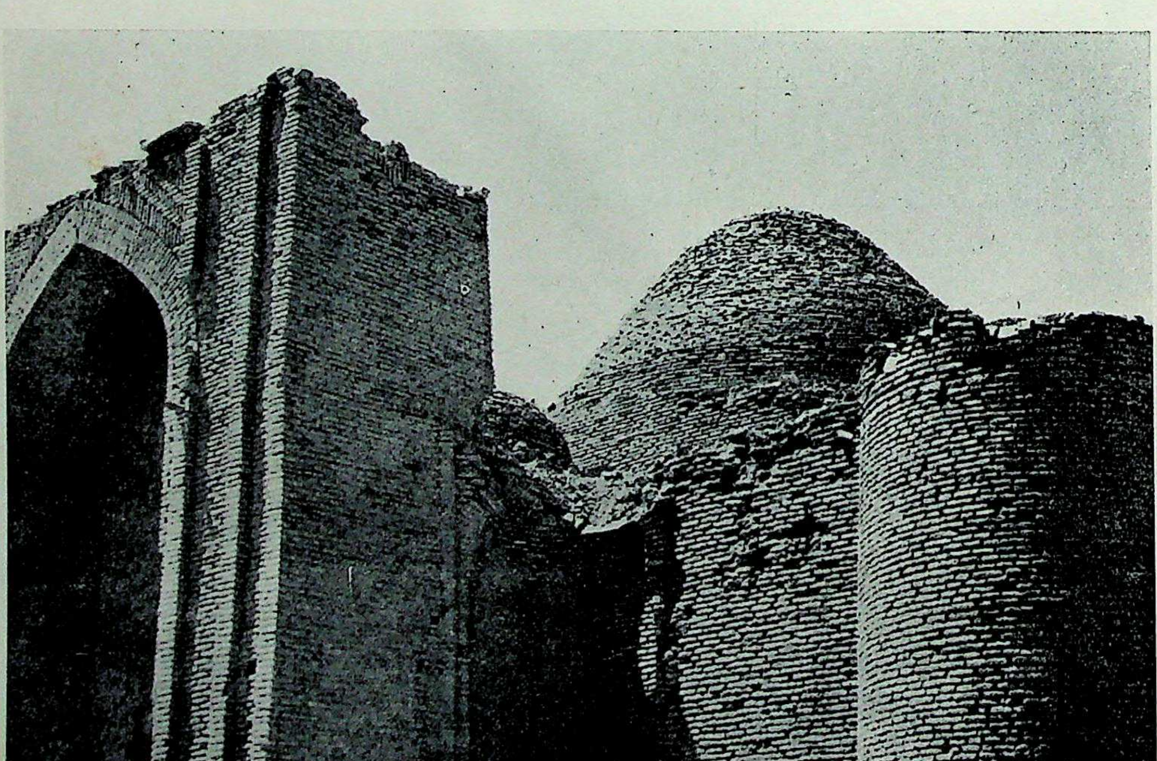
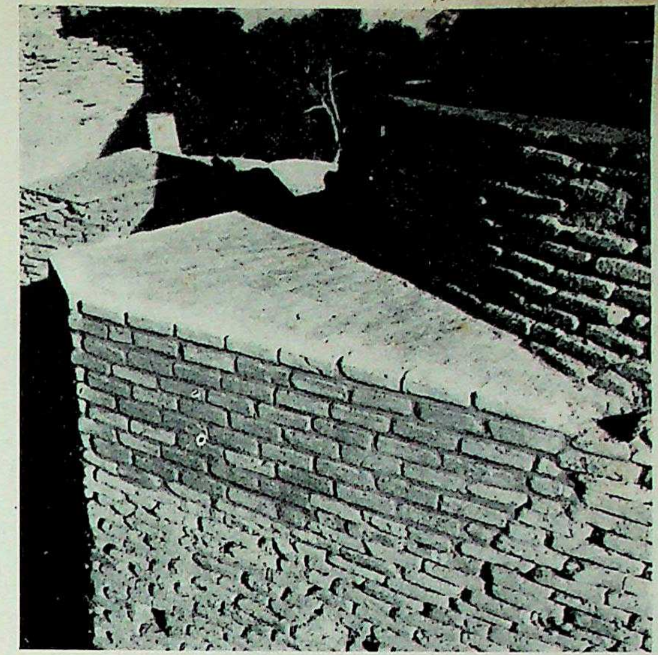


Fig. 24.



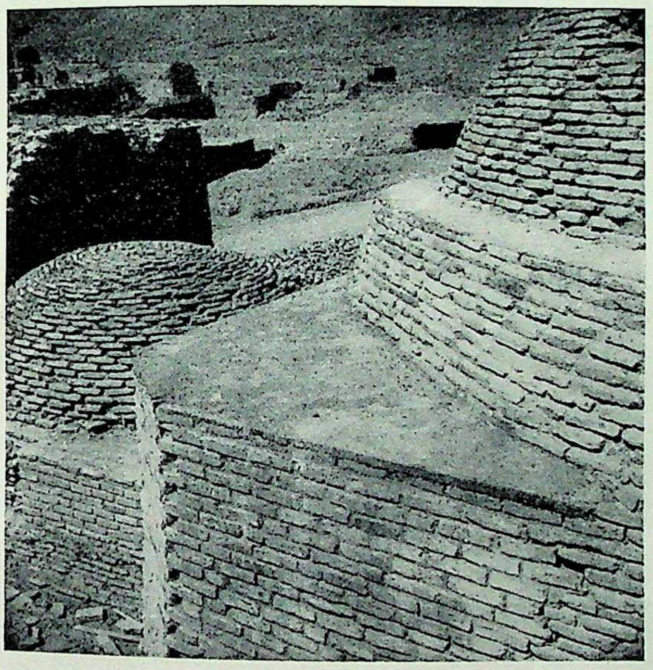


Fig. 25.

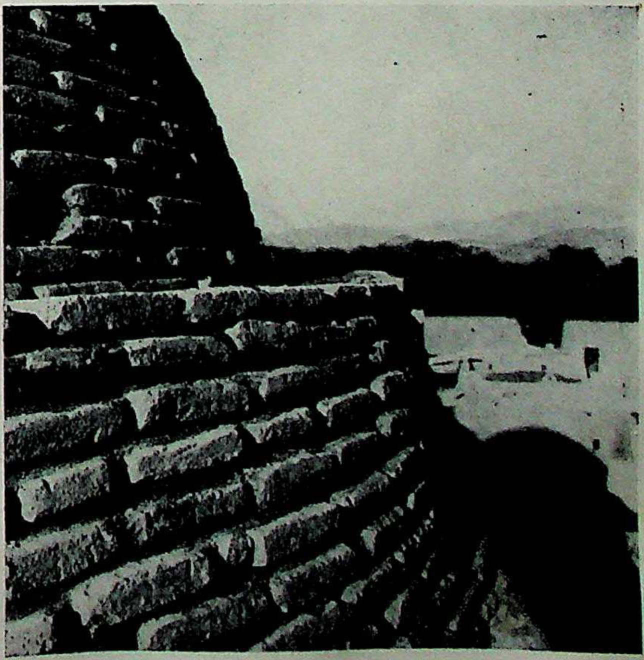


Fig. 26.

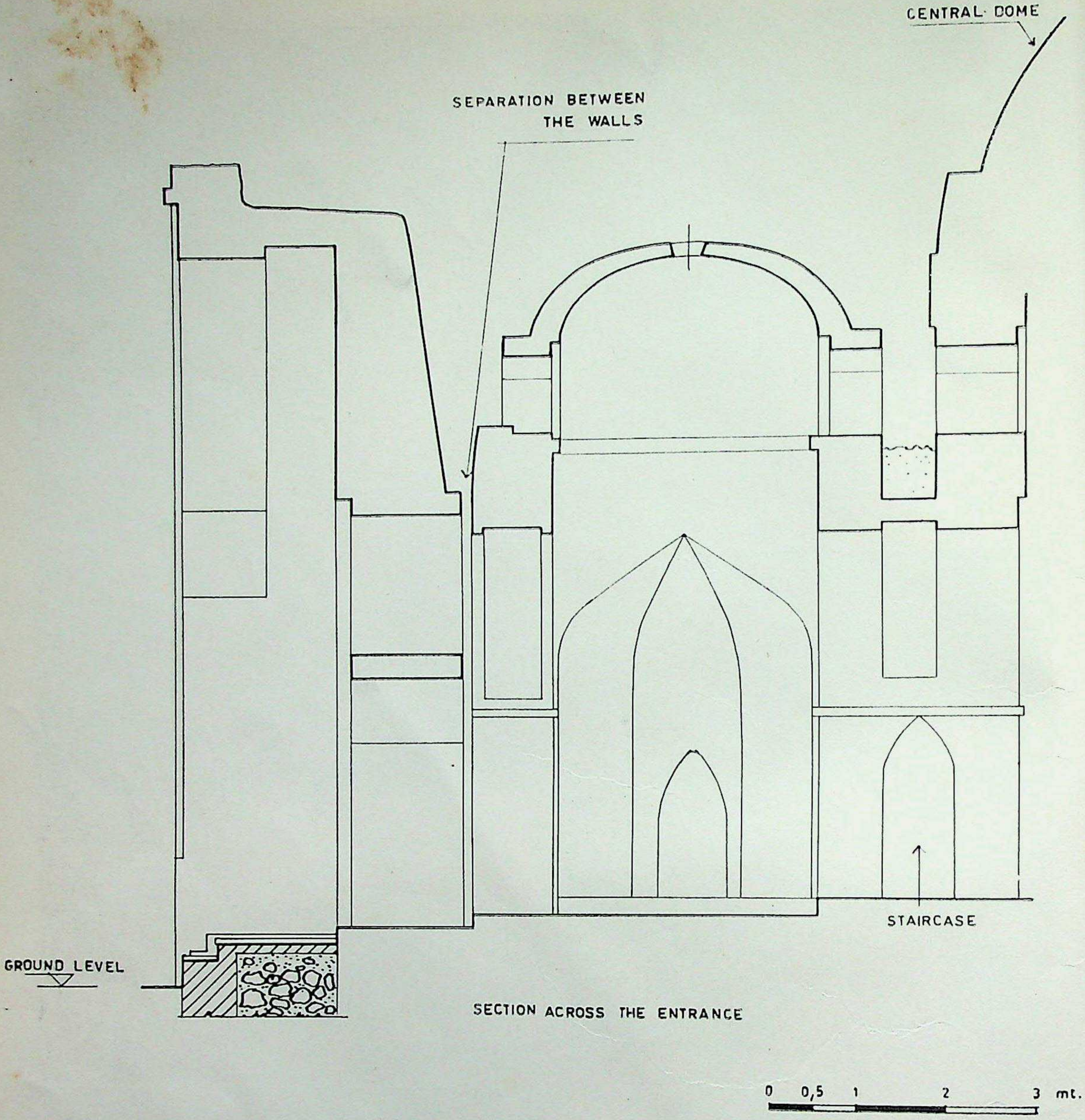

CENTRAL DOME
SEPARATION BETWEEN THE WALLS
STAIRCASE
GROUND LEVEL
SECTION ACROSS THE ENTRANCE
0 0,5 1 2 3 mt.

Fig. 27.

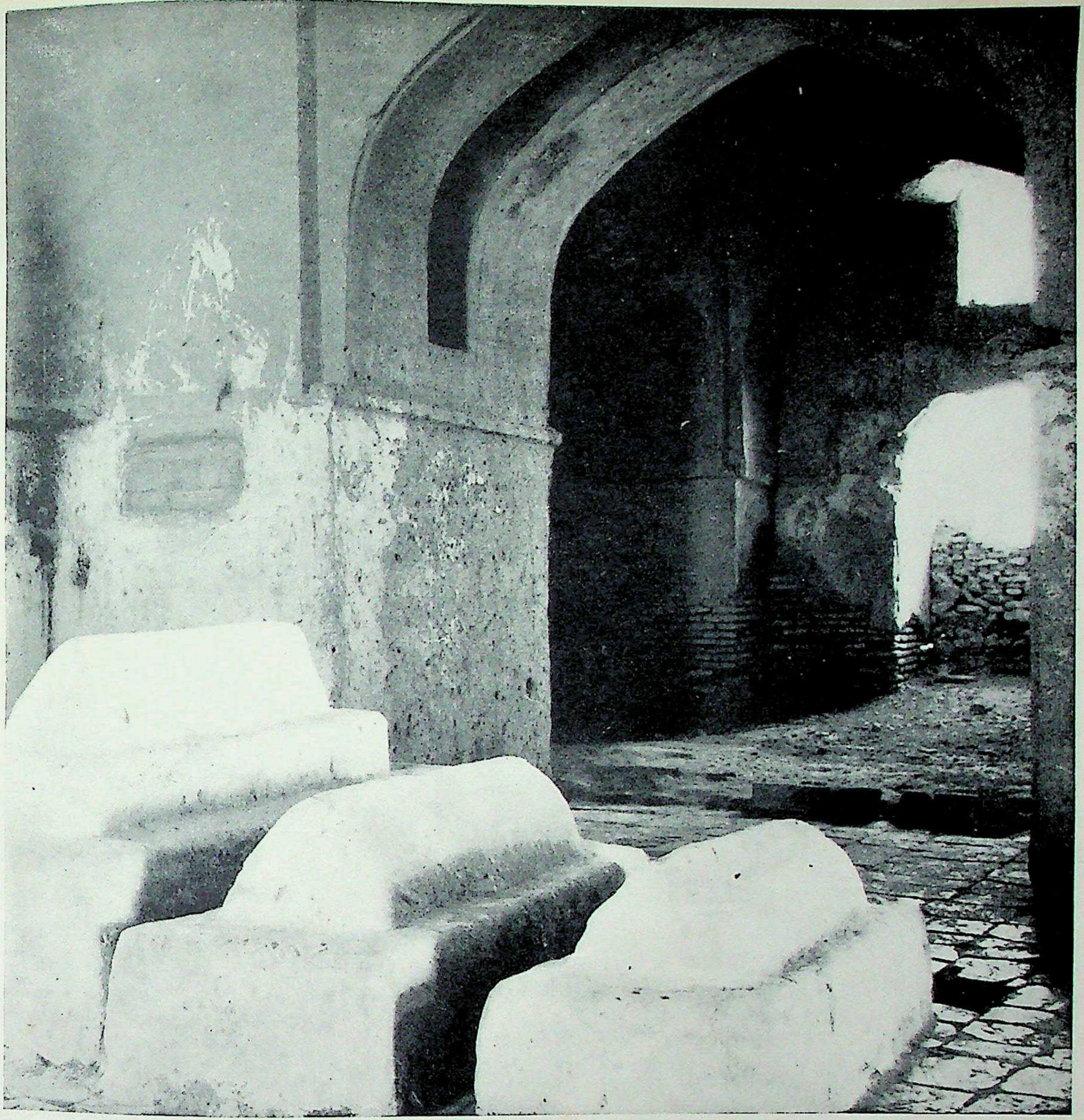


Fig. 28.

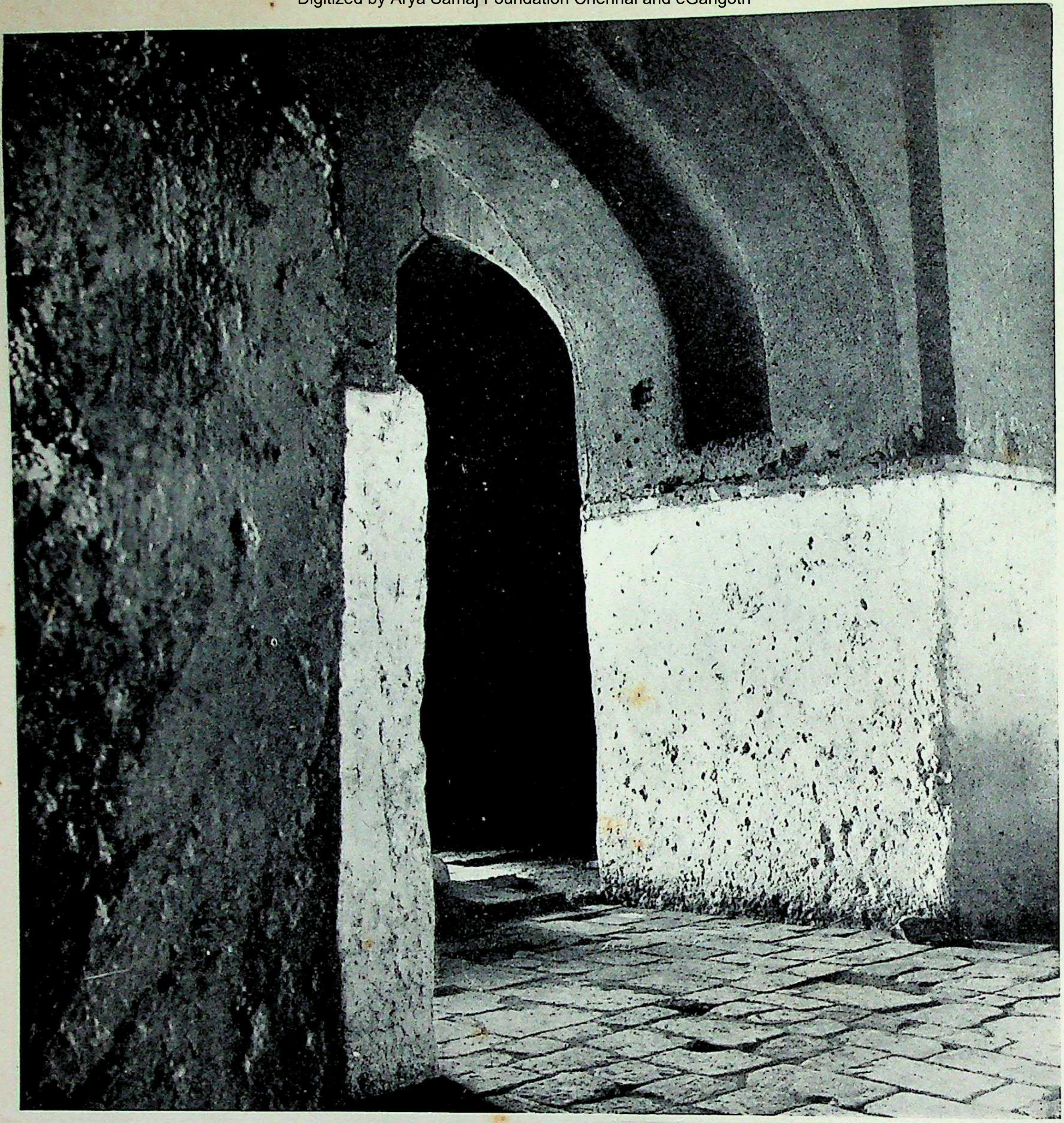


Fig. 29.

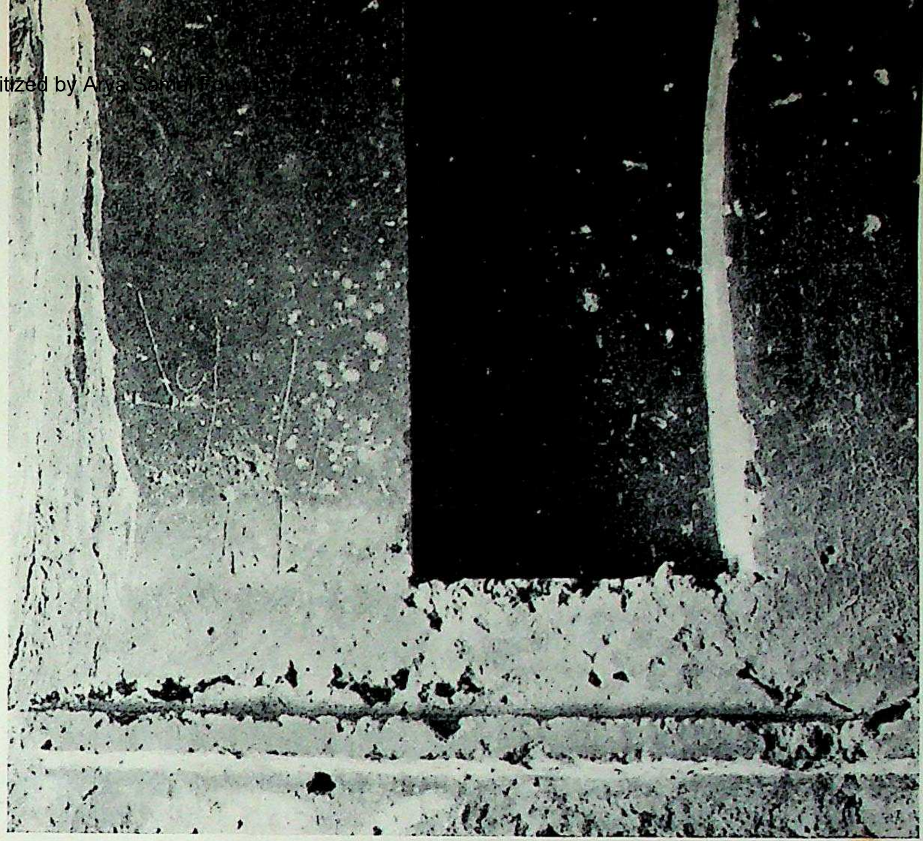
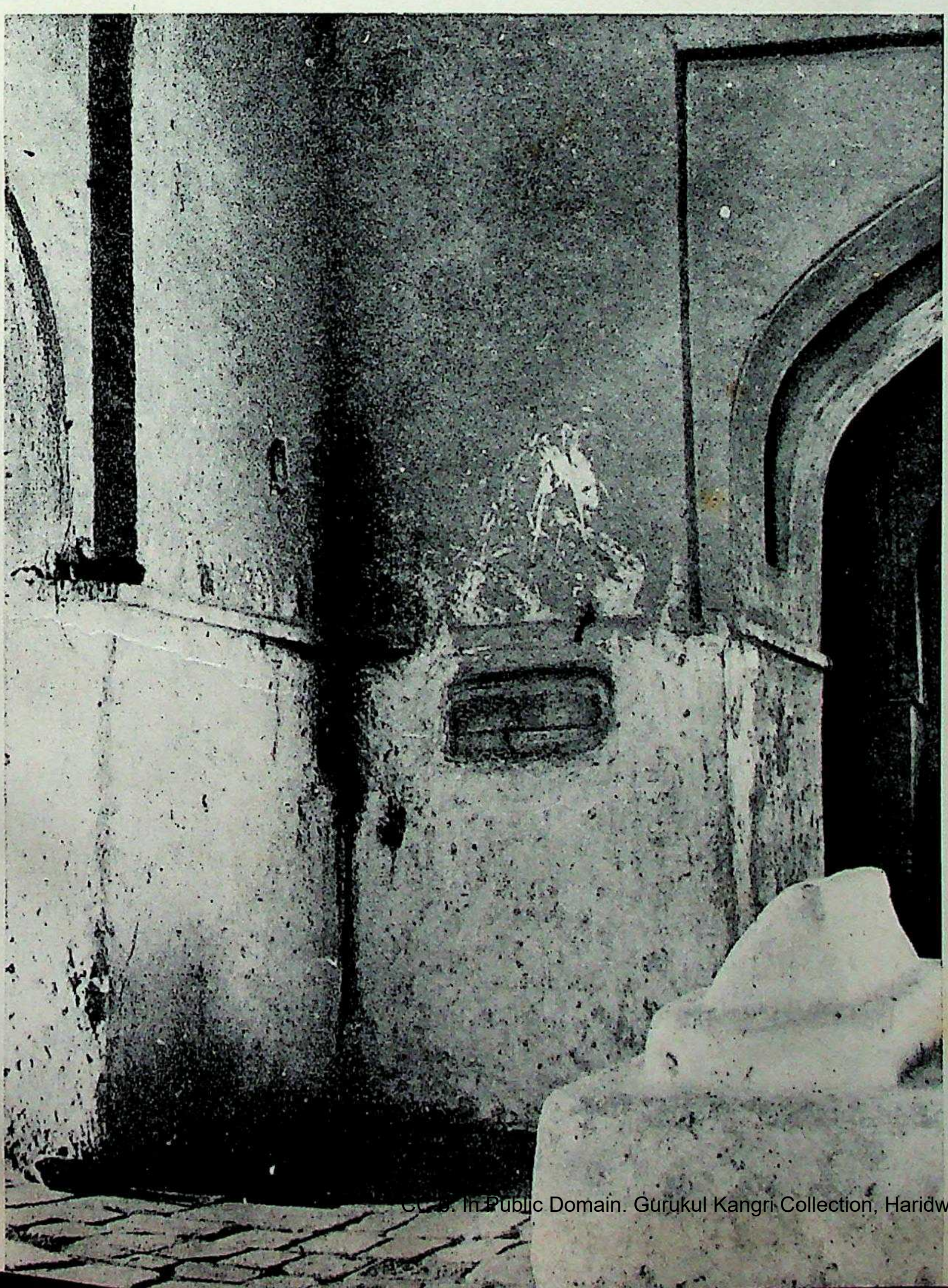


Fig. 30.

Fig. 31.



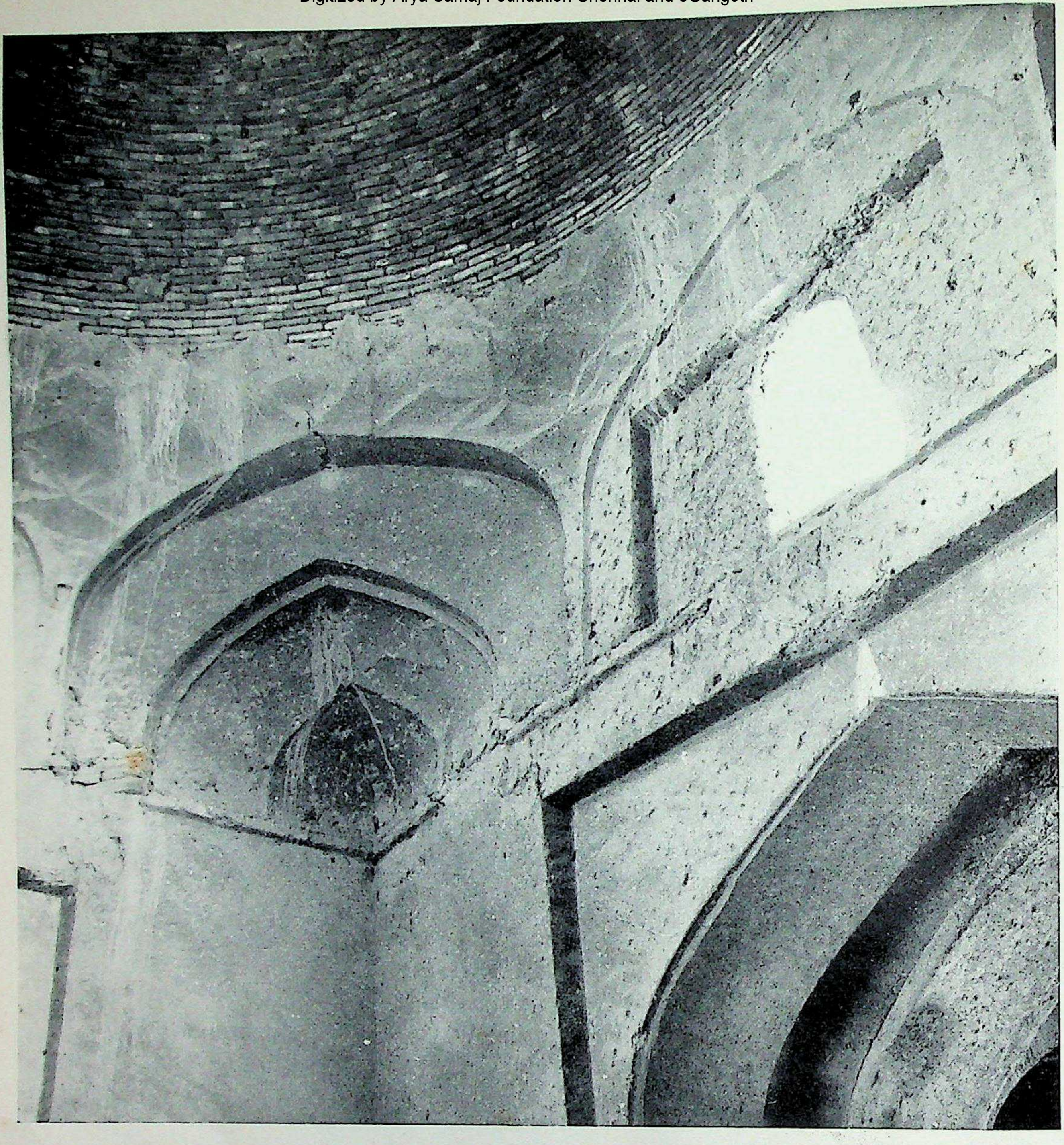


Fig. 32.

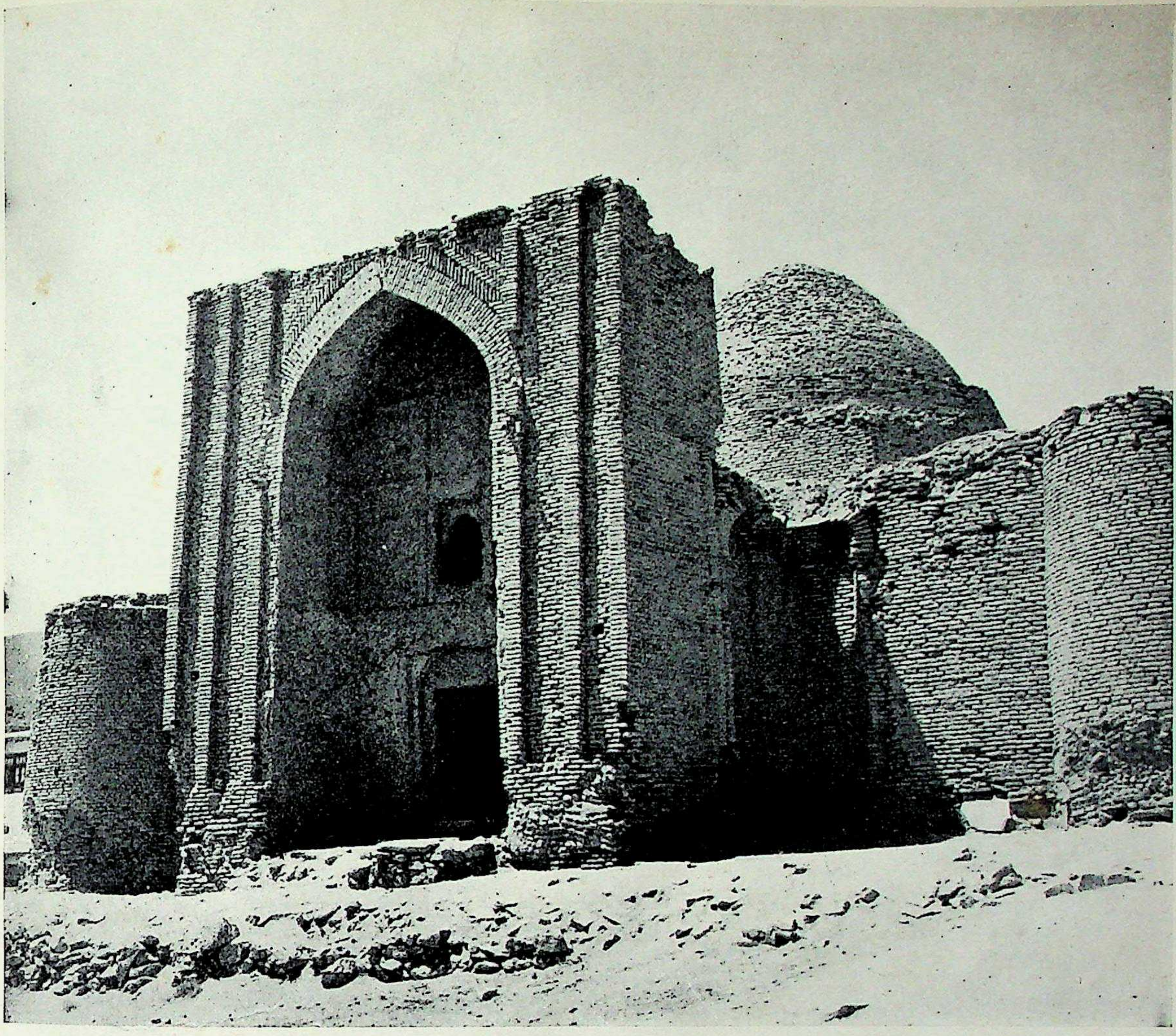


Fig. 33.

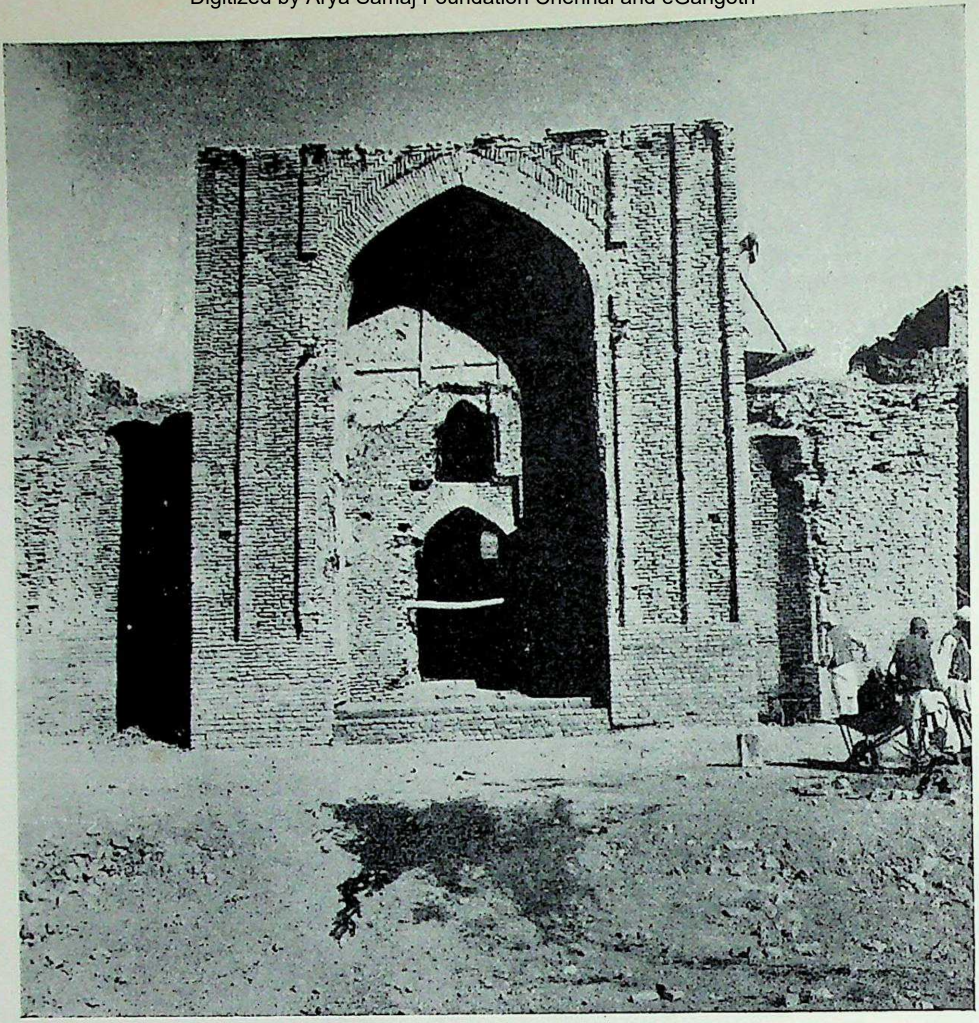


Fig. 34.

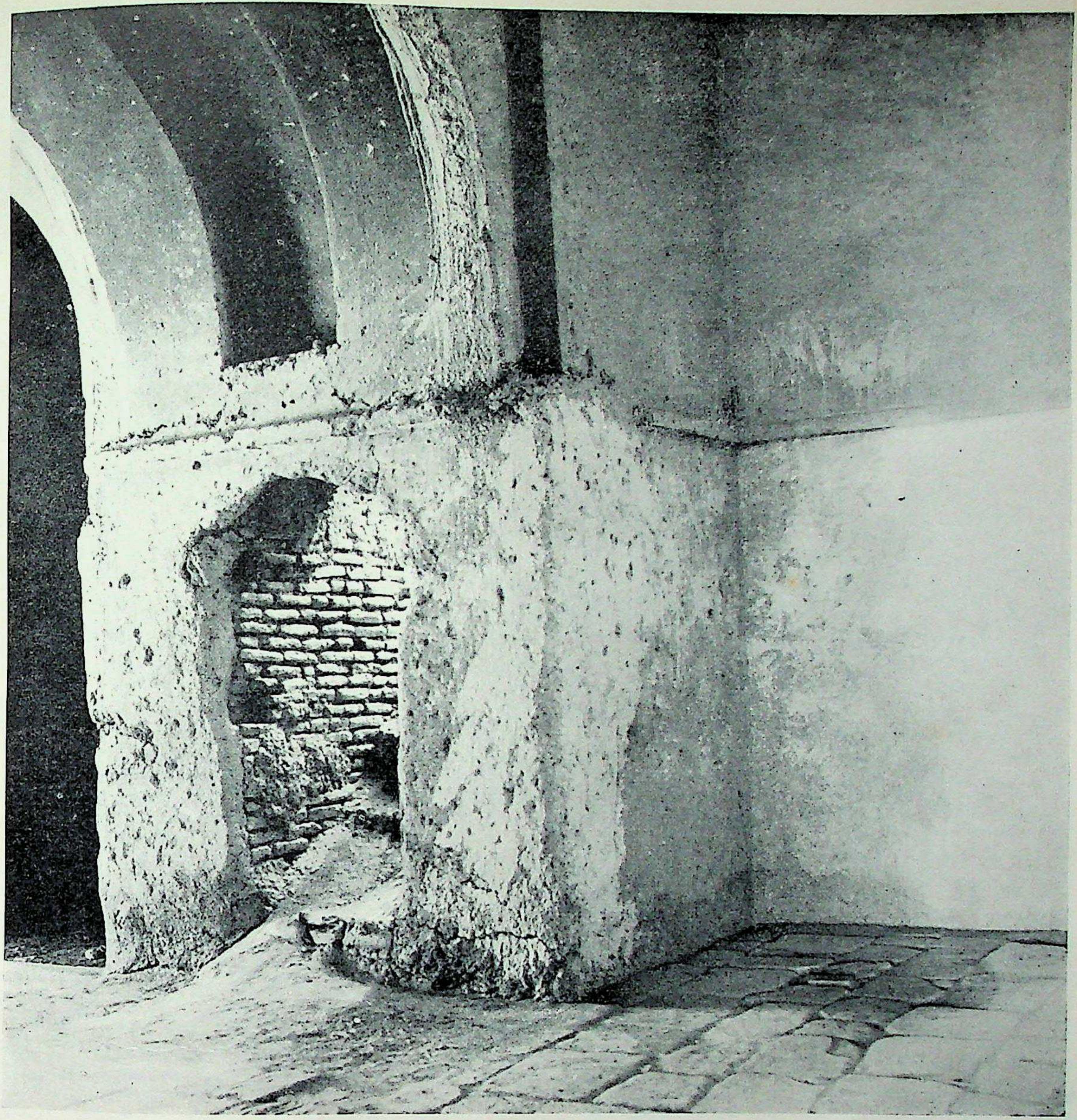


Fig. 35.

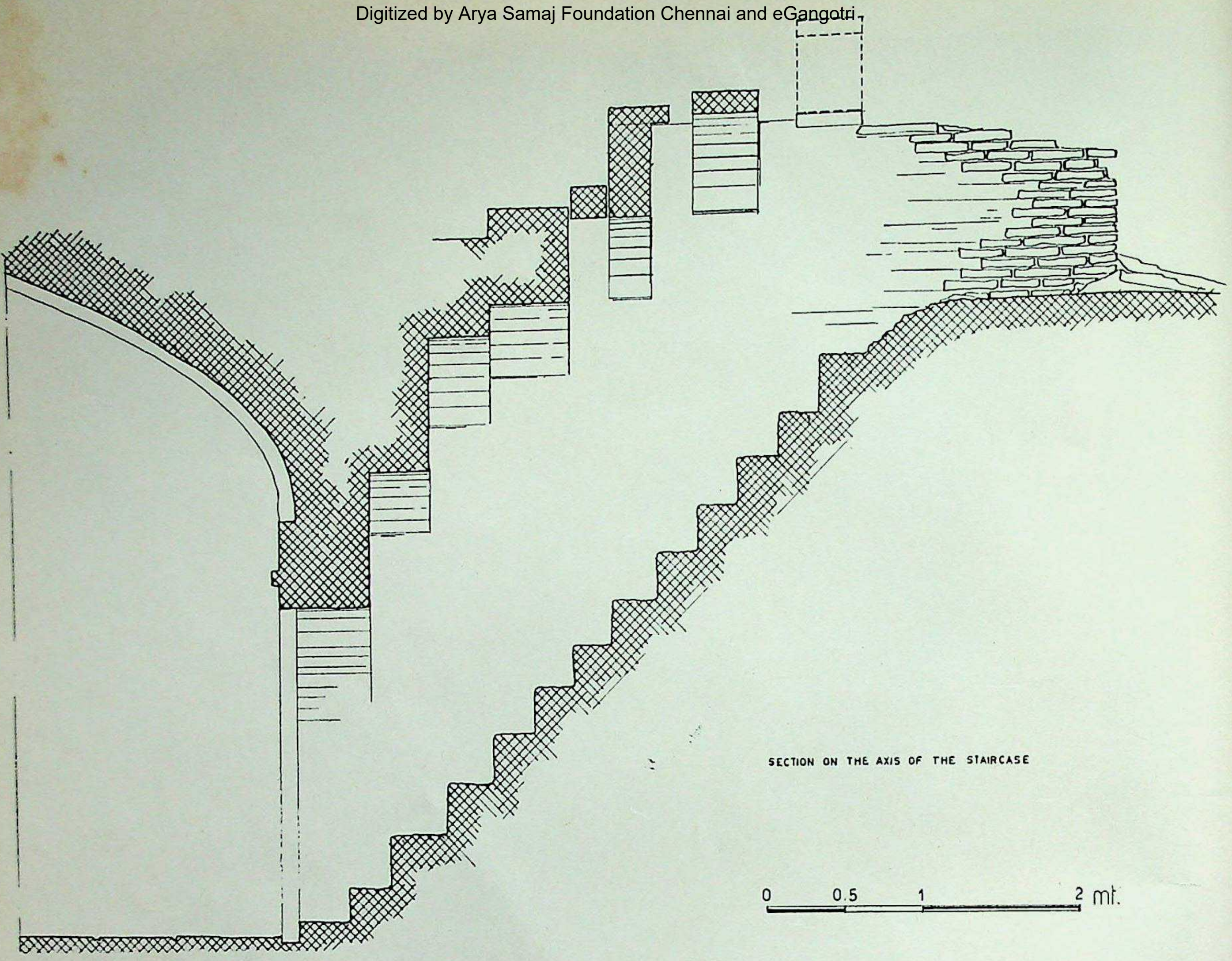

SECTION ON THE AXIS OF THE STAIRCASE
0
0.5
1
2 mt.

Fig. 36.

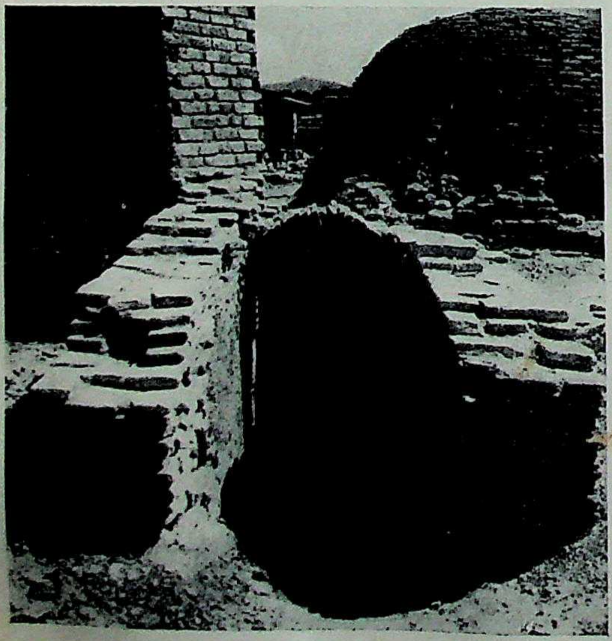


Fig. 37.

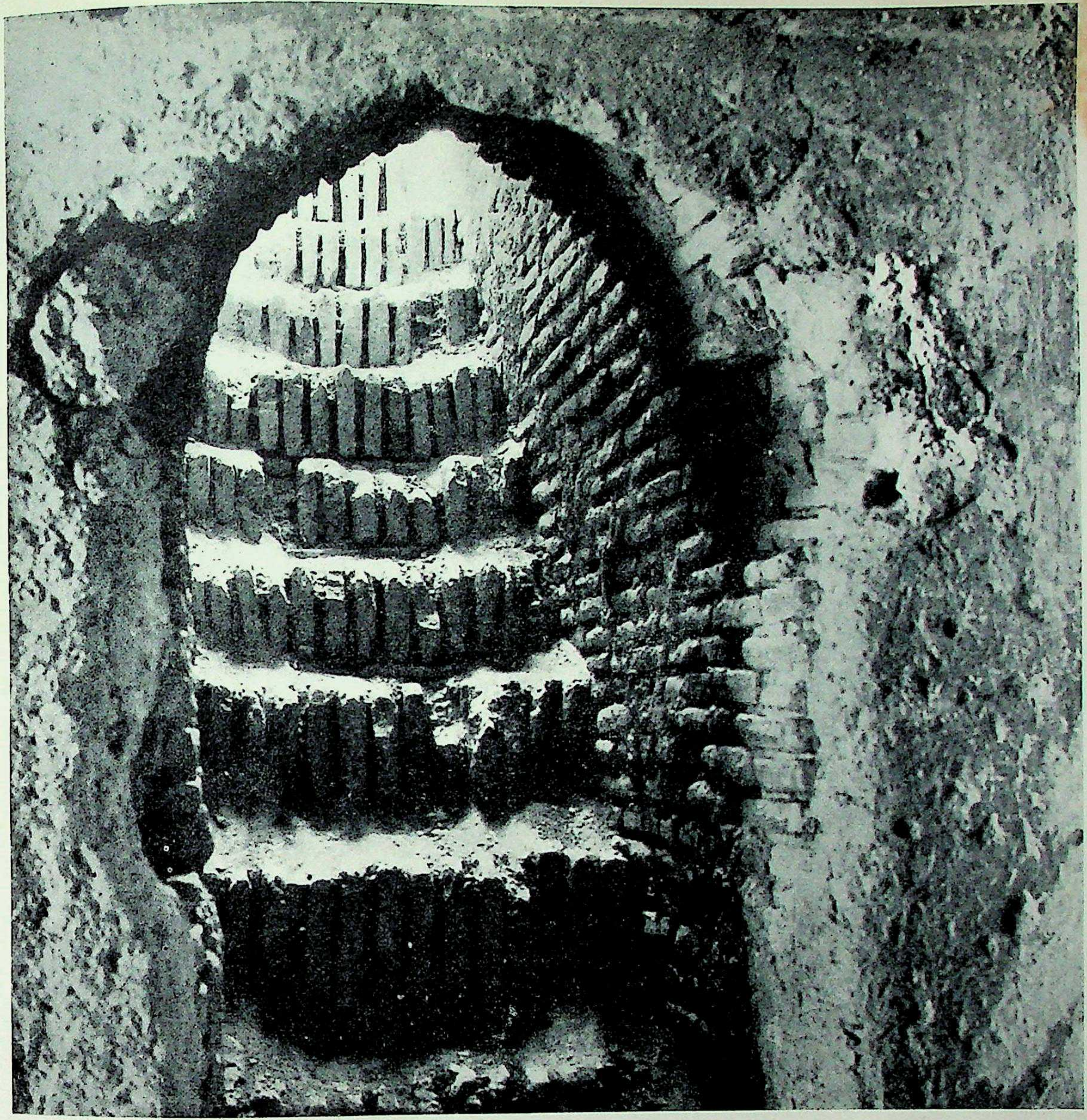


Fig. 38.

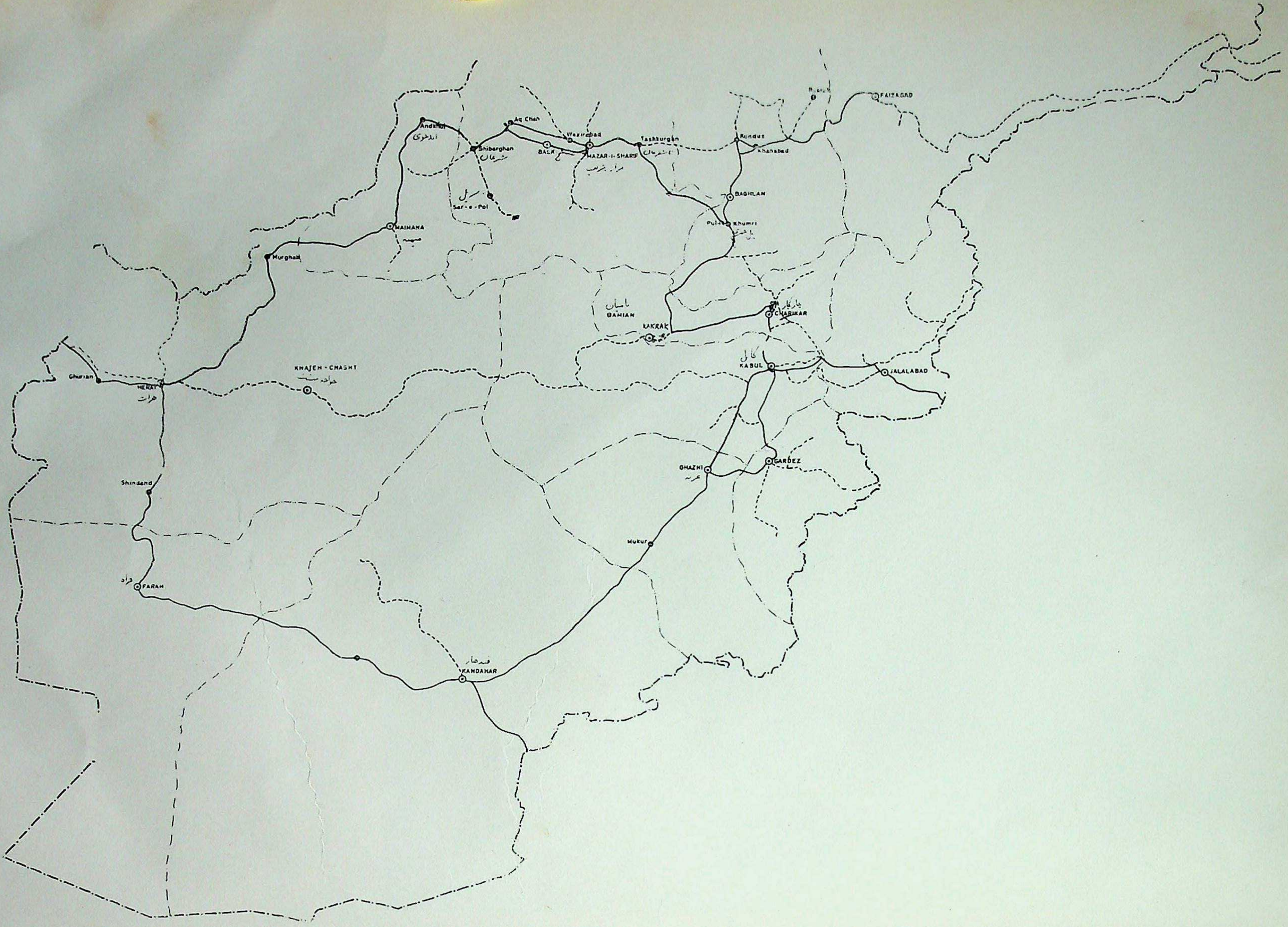

FAIZABAD
Rustak
Kunduz
Khanabad
Tashkurgan
Wazirabad
MAZAR-I-SHARIF
BALK
Aq Chah
Andkhui
Shibarghan
Sar-e-Pol
MAIMANA
Murghab
BAGHLAN
Pul-i-Khumri
BAMIAN
KAKRAK
CHARIKAR
KABUL
JALALABAD
GARDEZ
GHAZNI
Mukur
KANDAHAR
FARAH
Shindand
HERAT
Ghurian
KHAJEH-CHASHT

Fig. 39.

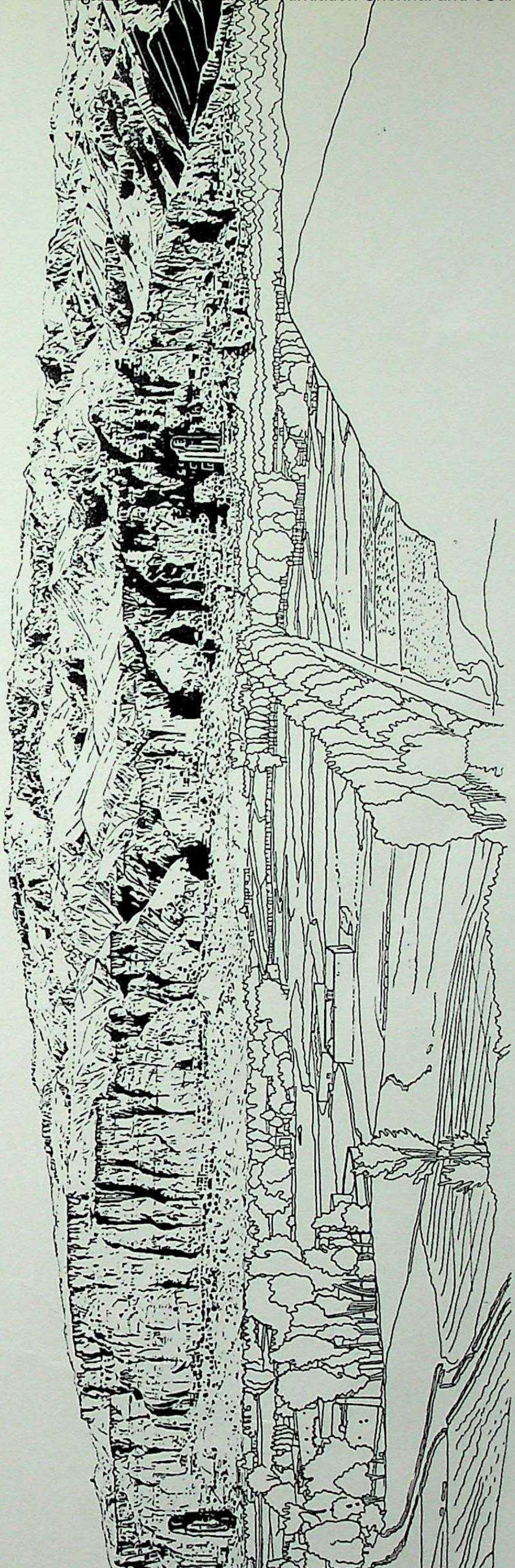


Fig. 40.

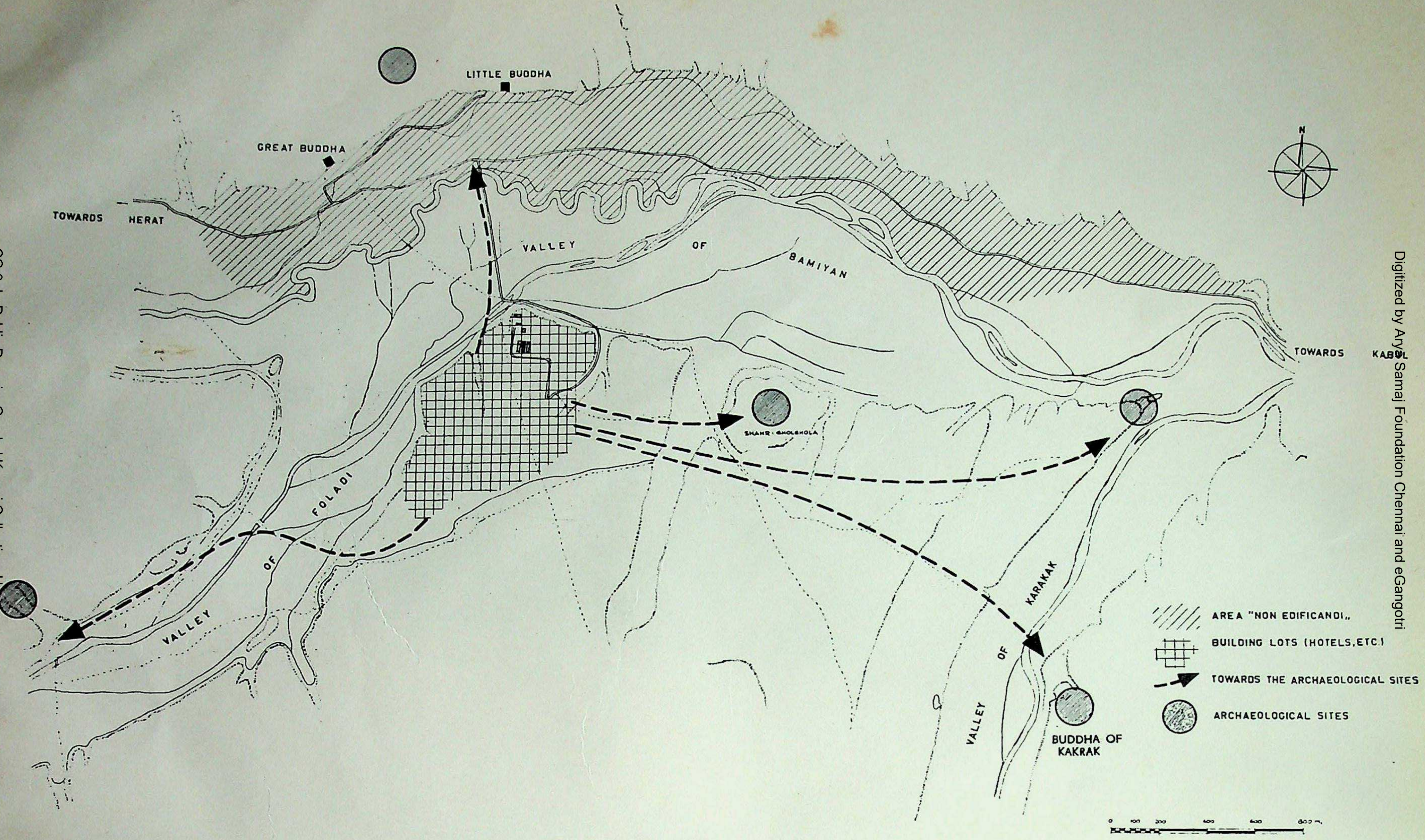

LITTLE BUDDHA
GREAT BUDDHA
TOWARDS HERAT
N
VALLEY OF BAMIYAN
TOWARDS KABUL
SHAHR-GHOLGHOLA
VALLEY OF FOLADI
VALLEY OF KARAKAK
BUDDHA OF KAKRAK
AREA "NON EDIFICANDI„
BUILDING LOTS (HOTELS, ETC.)
TOWARDS THE ARCHAEOLOGICAL SITES
ARCHAEOLOGICAL SITES
0 100 200 400 600 800 m.

Fig. 41.

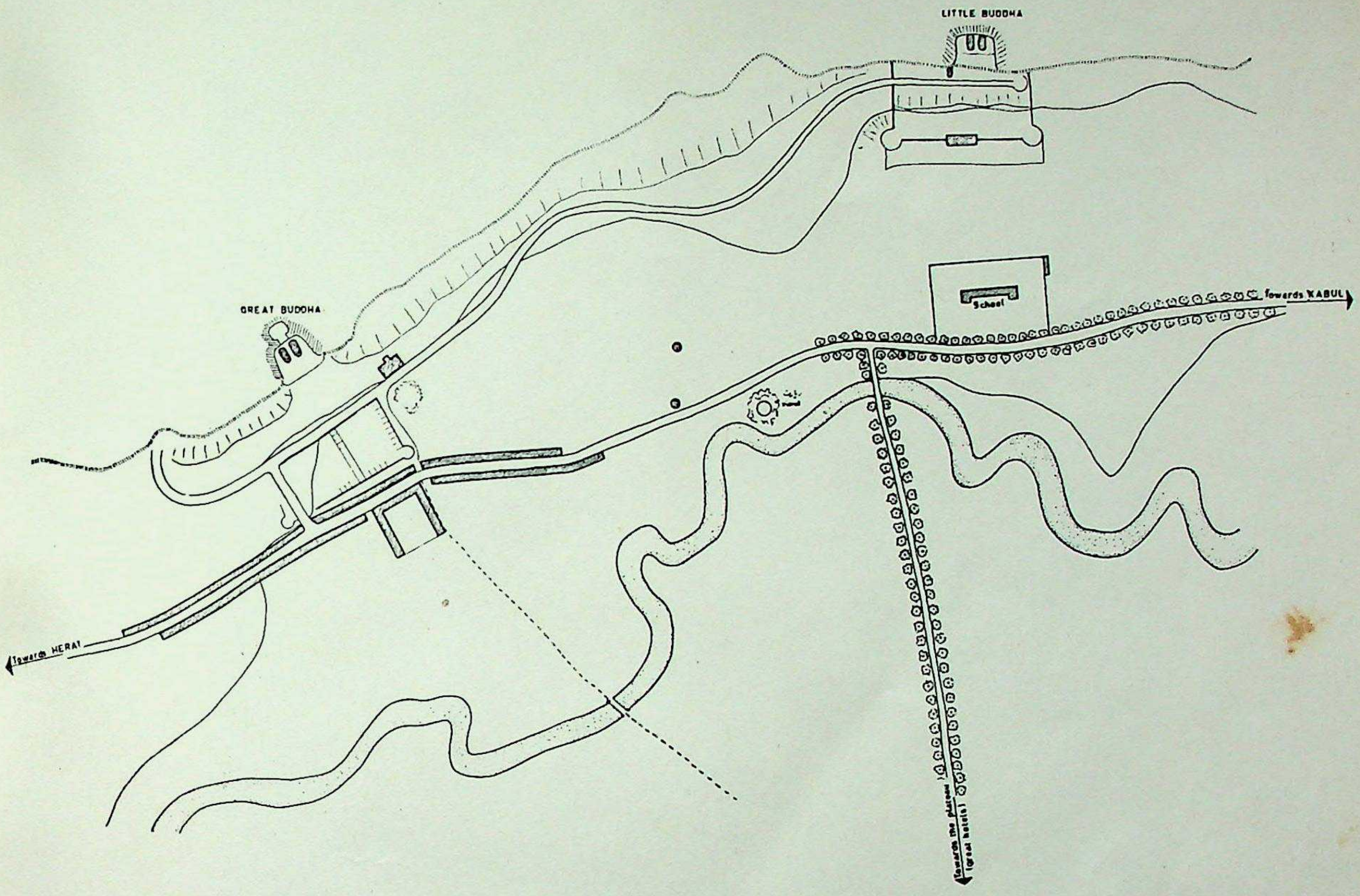

LITTLE BUDDHA
GREAT BUDDHA
School
towards KABUL
towards HERAT
towards the plateau (great hotels)

Fig. 42.

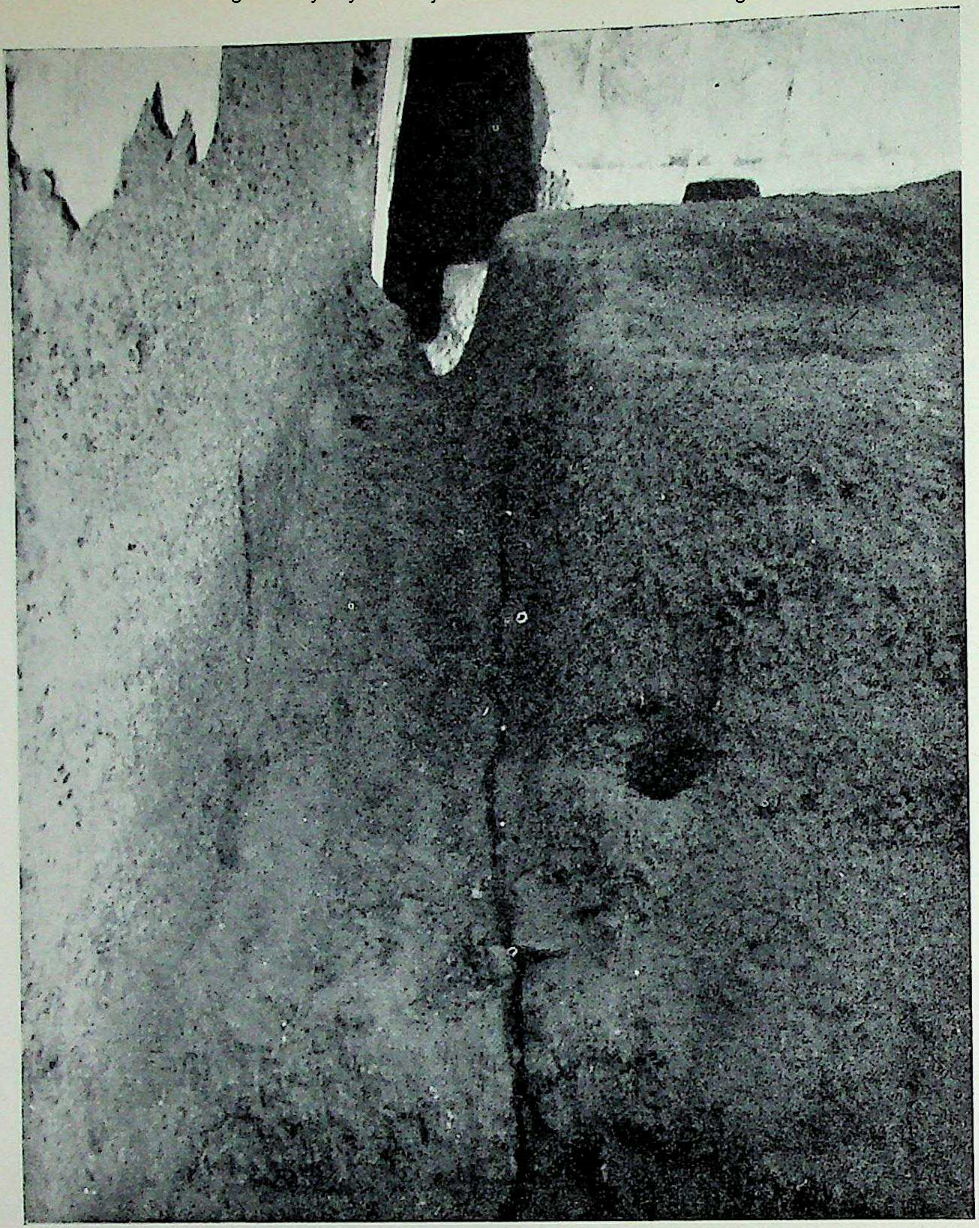


Fig. 43.

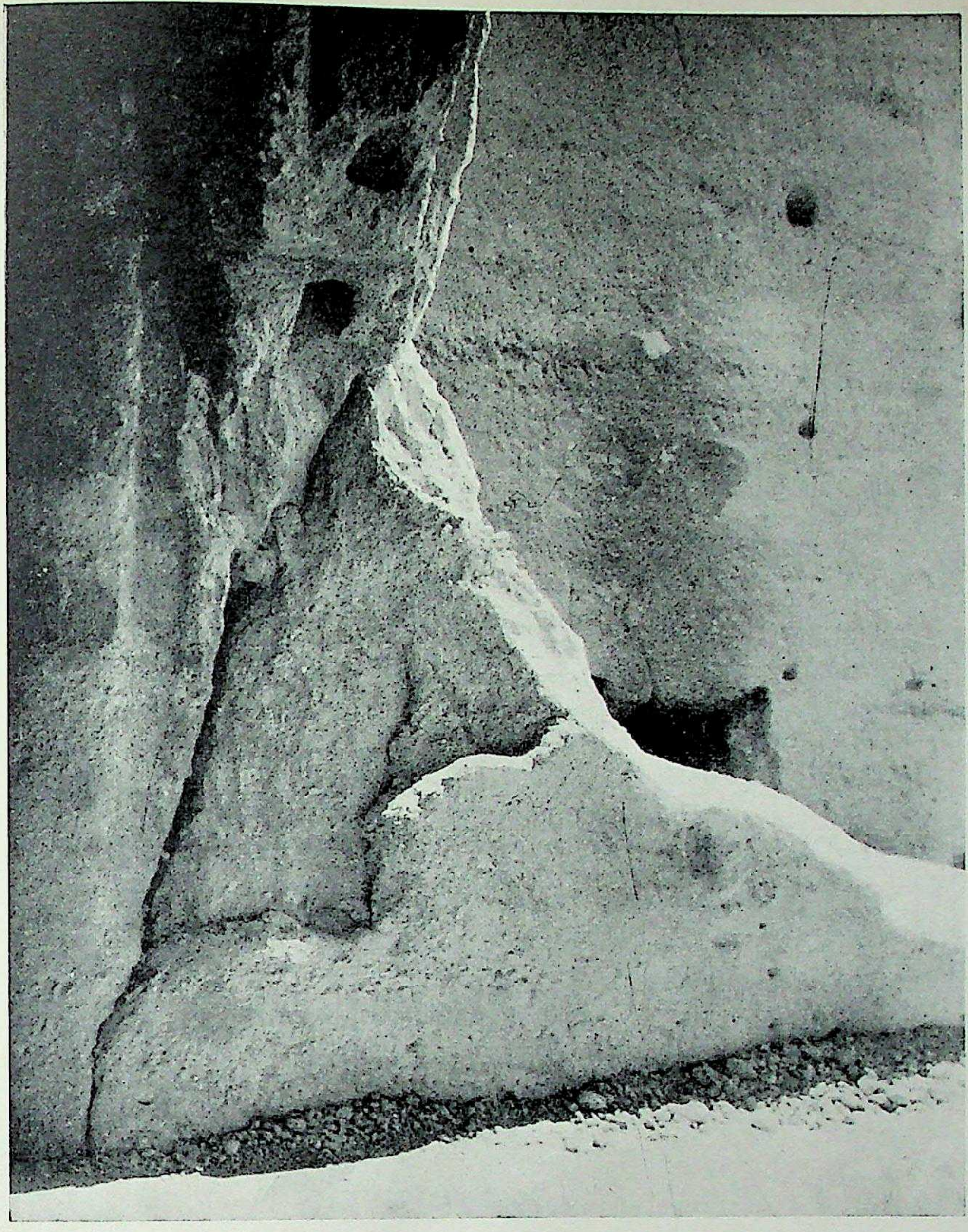


Fig. 44.

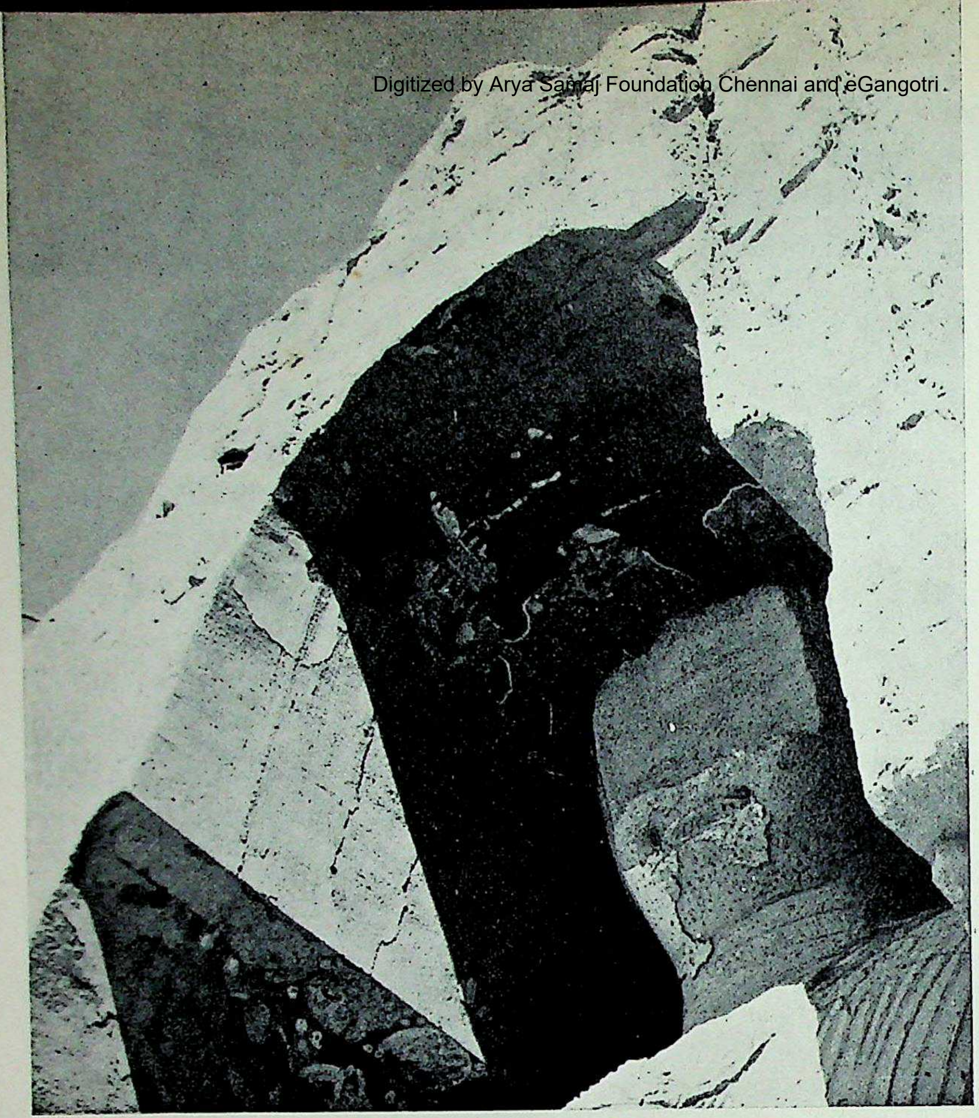
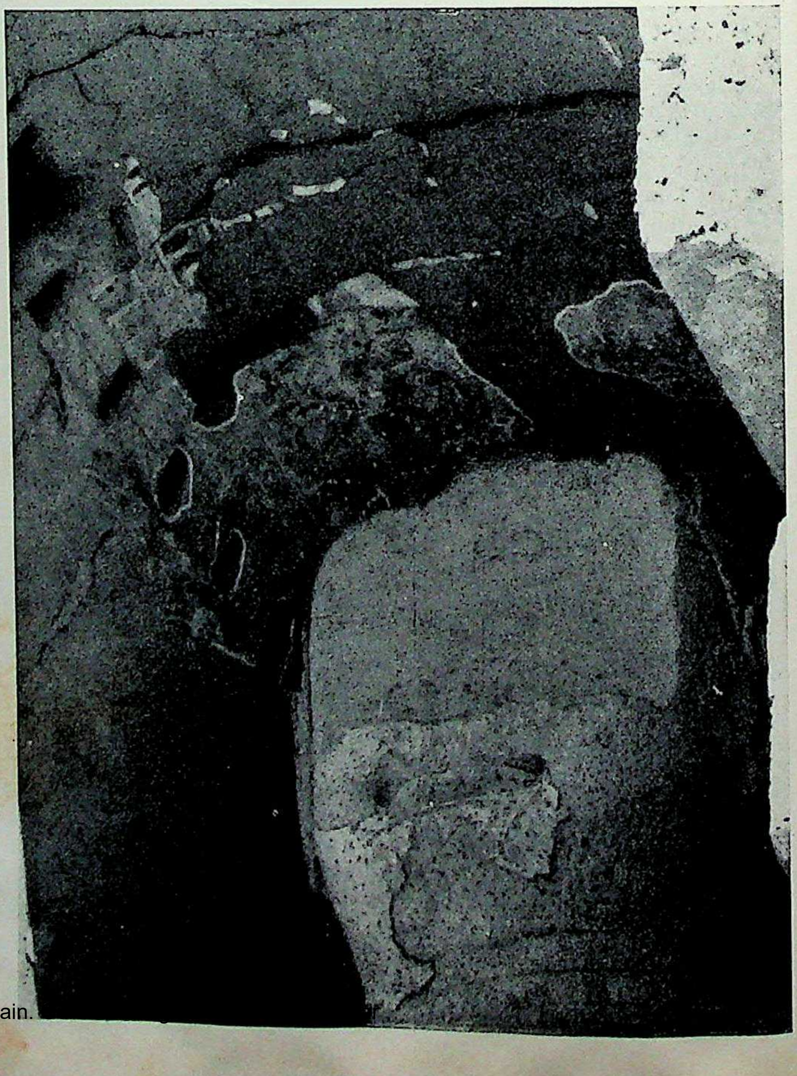


Fig. 45.

Fig. 46.



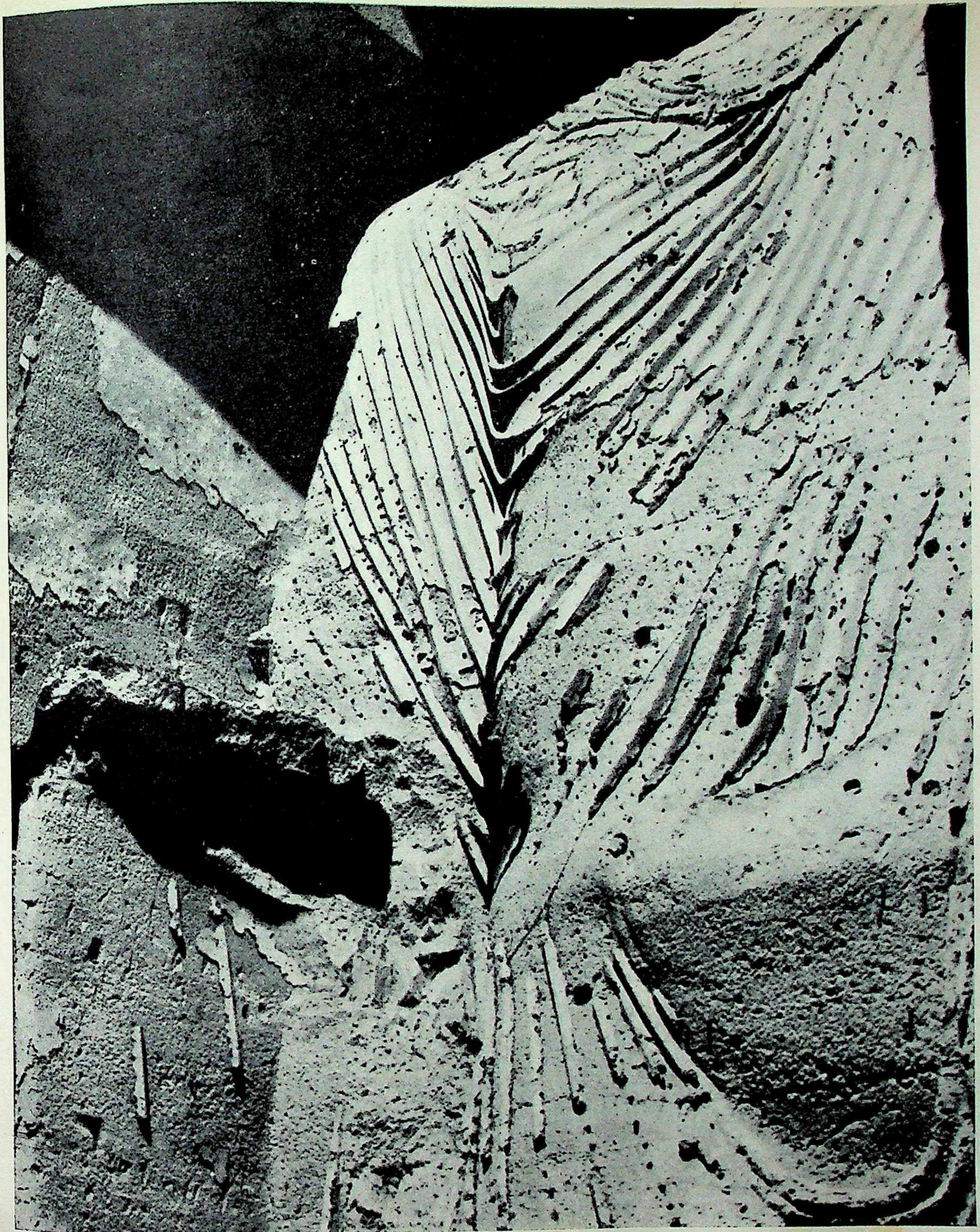


Fig. 47.

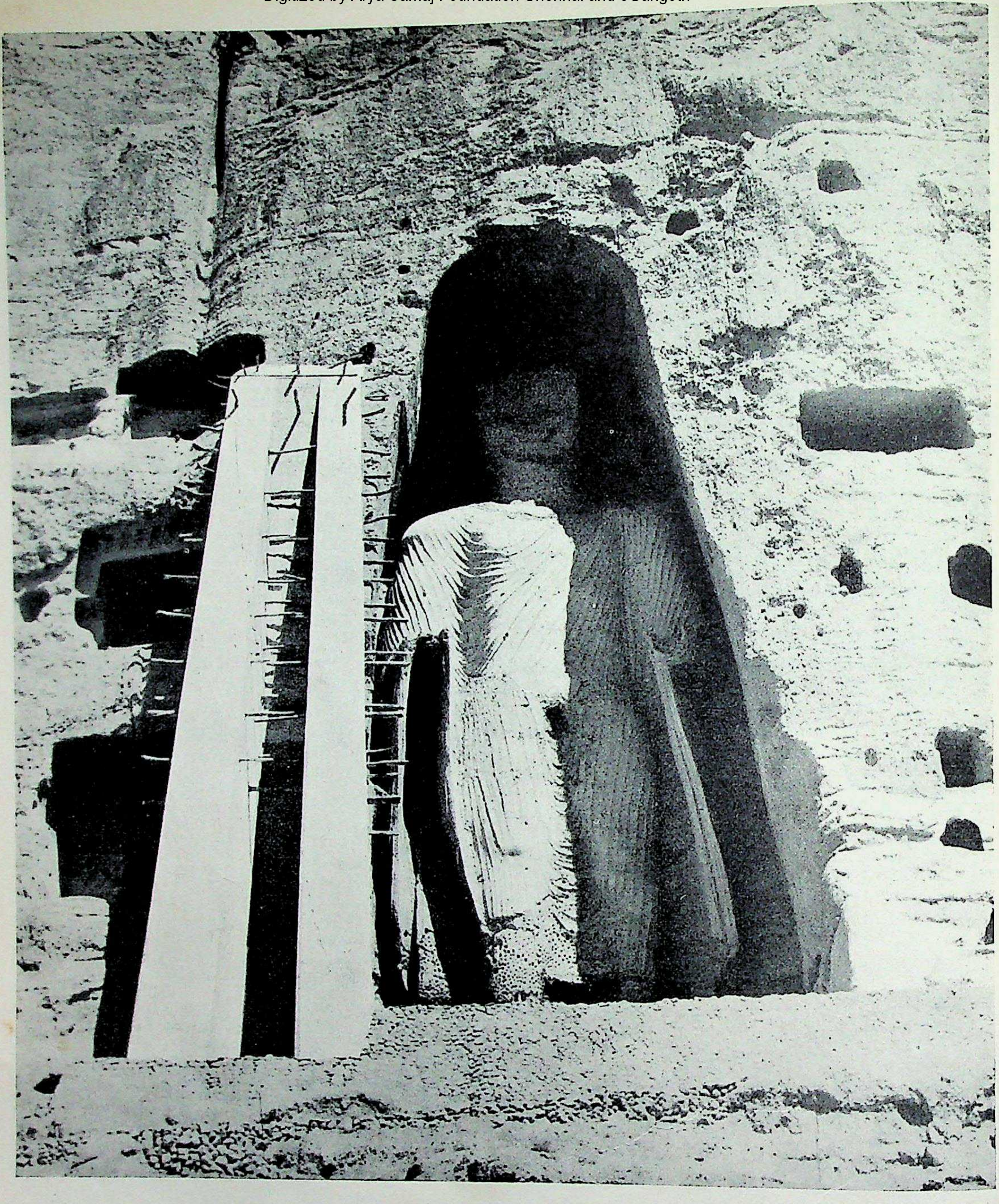


Fig. 48.

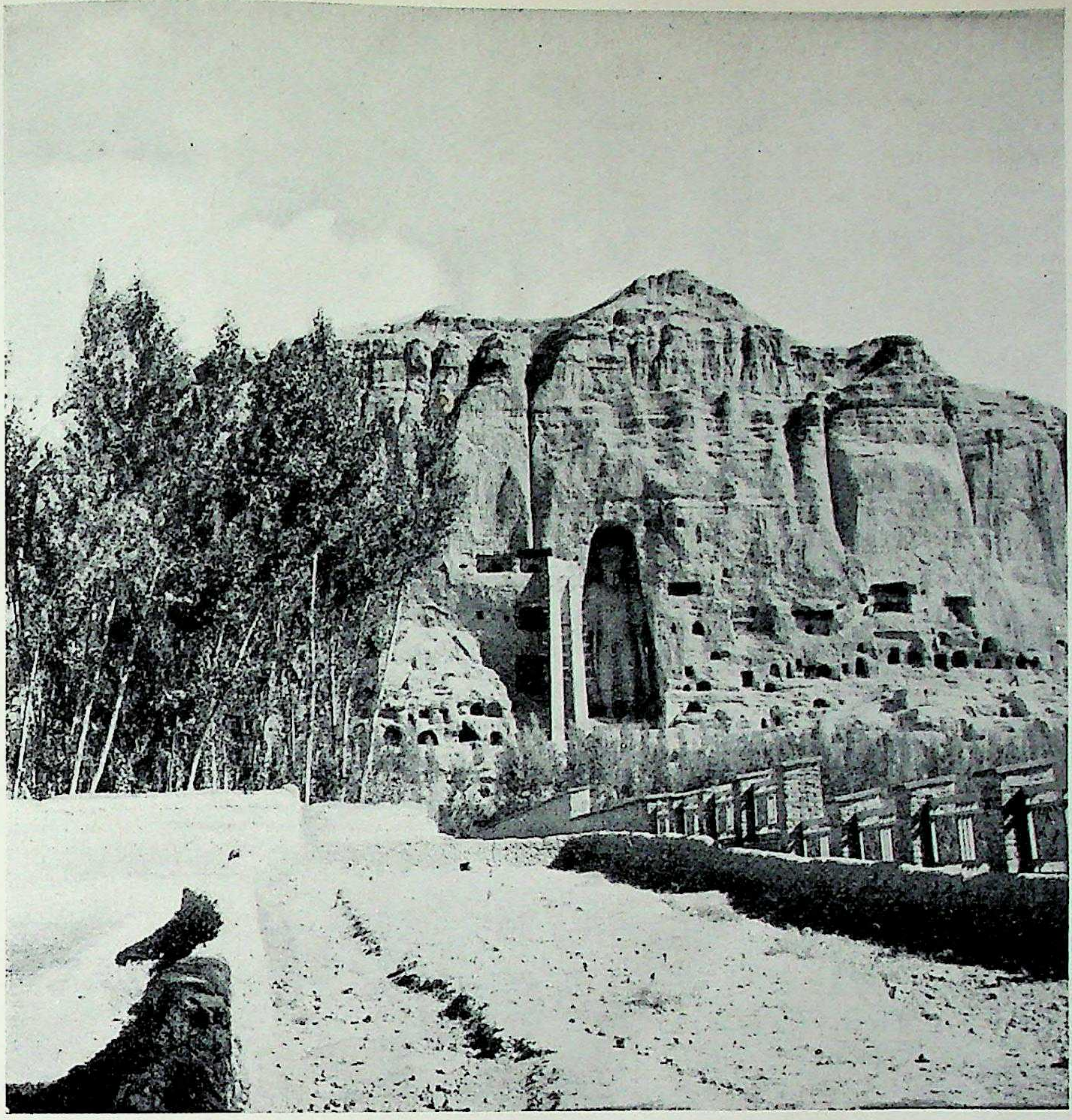


Fig. 49.

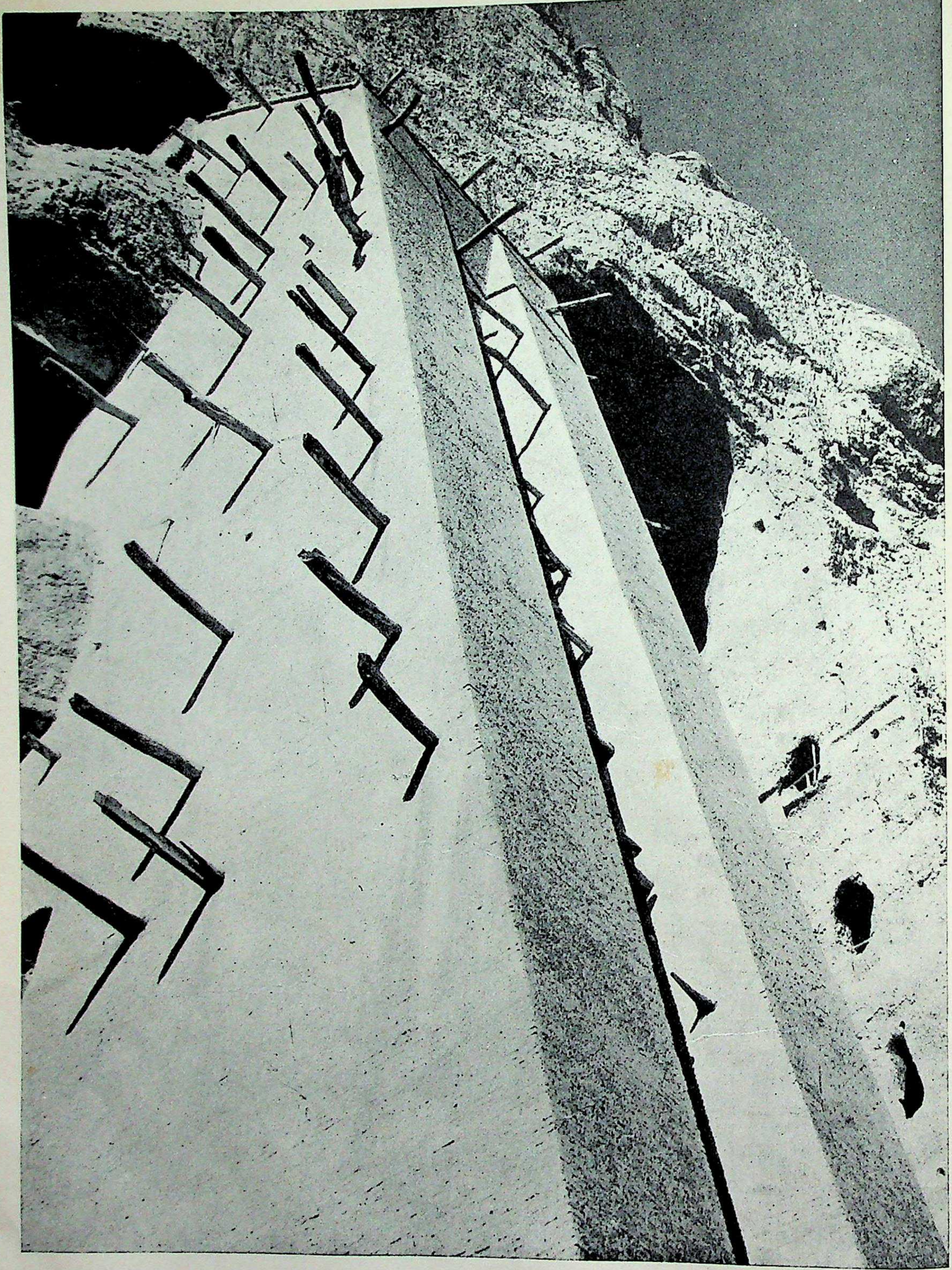


Fig. 50.

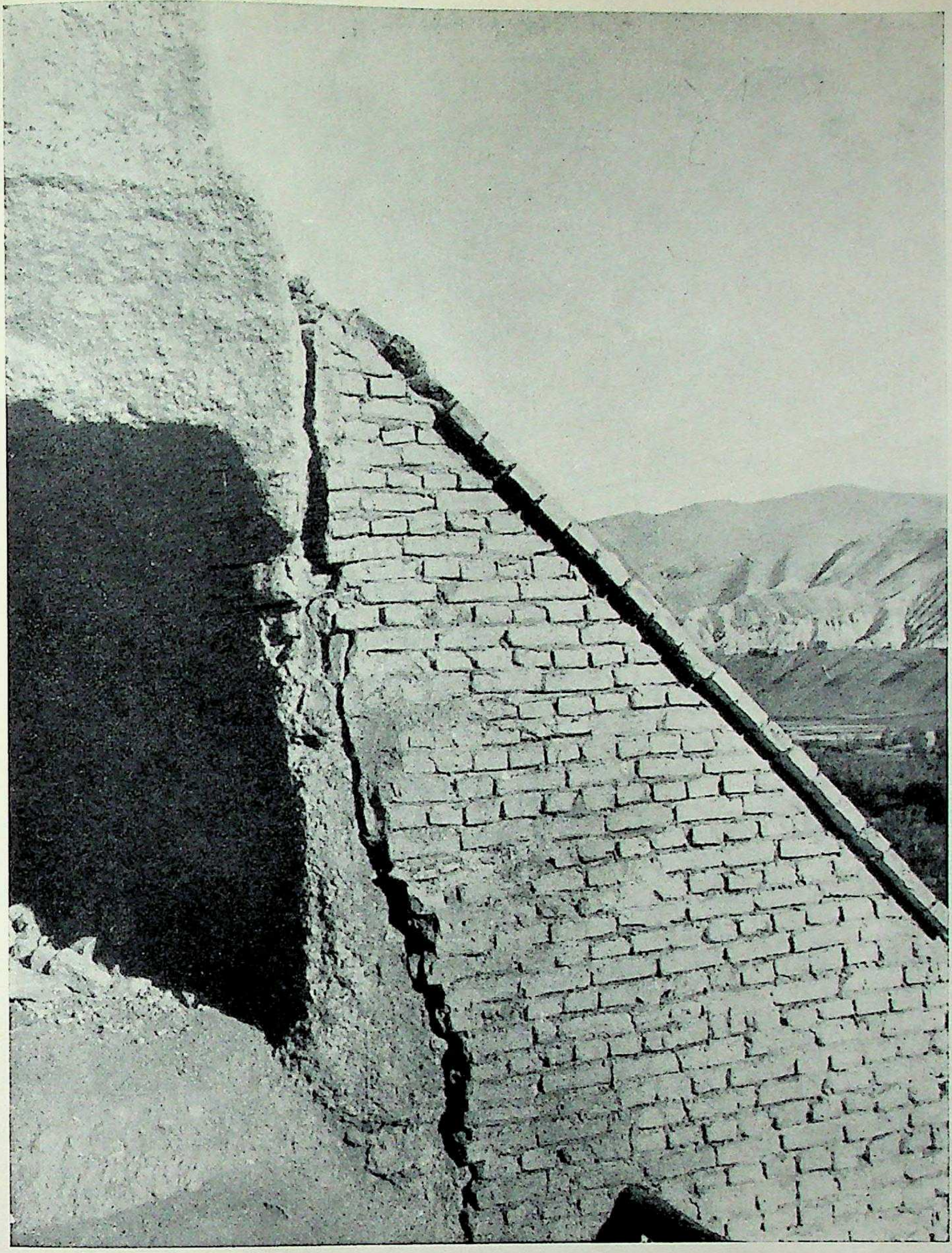


Fig. 51.

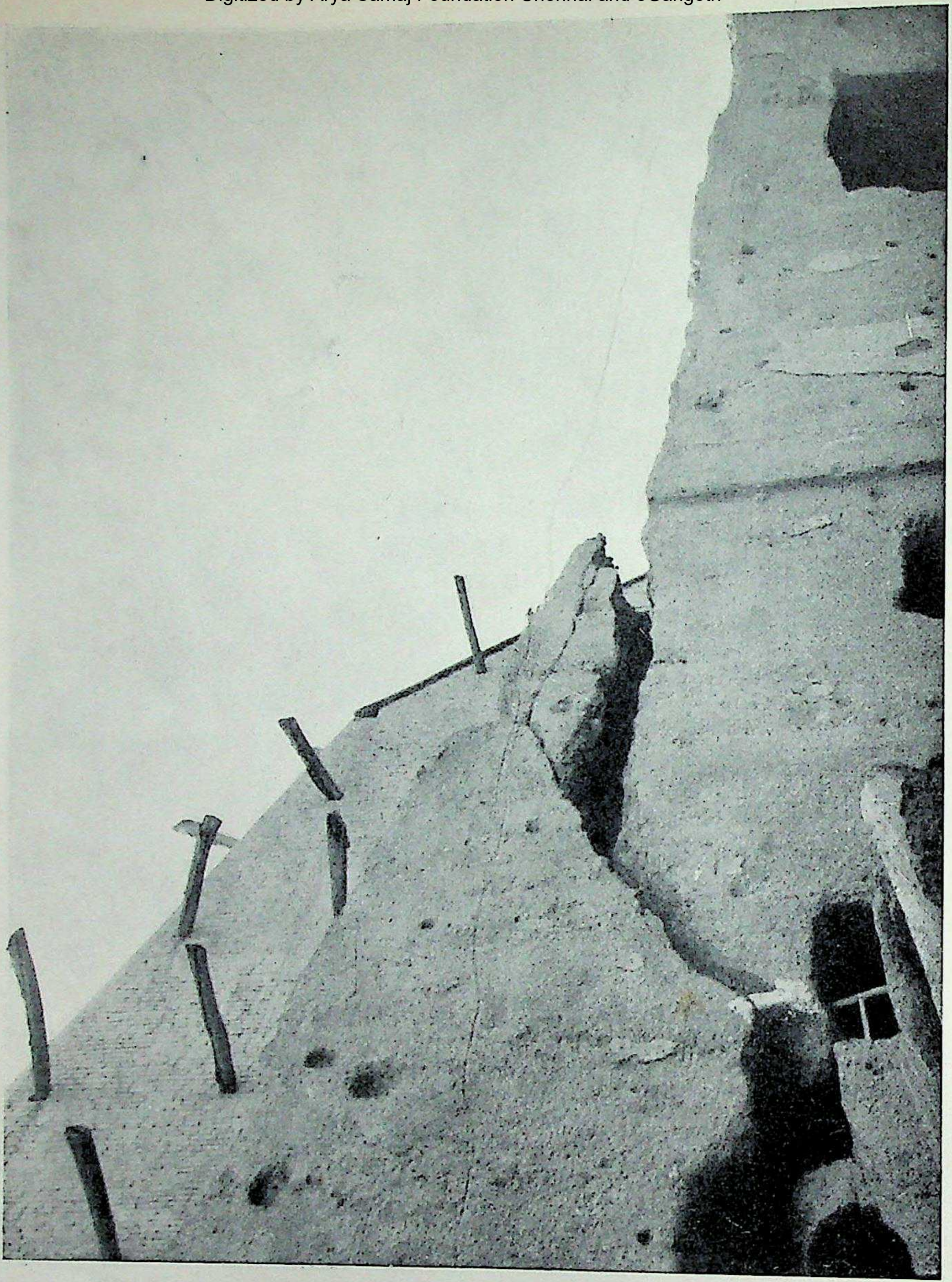


Fig. 52.

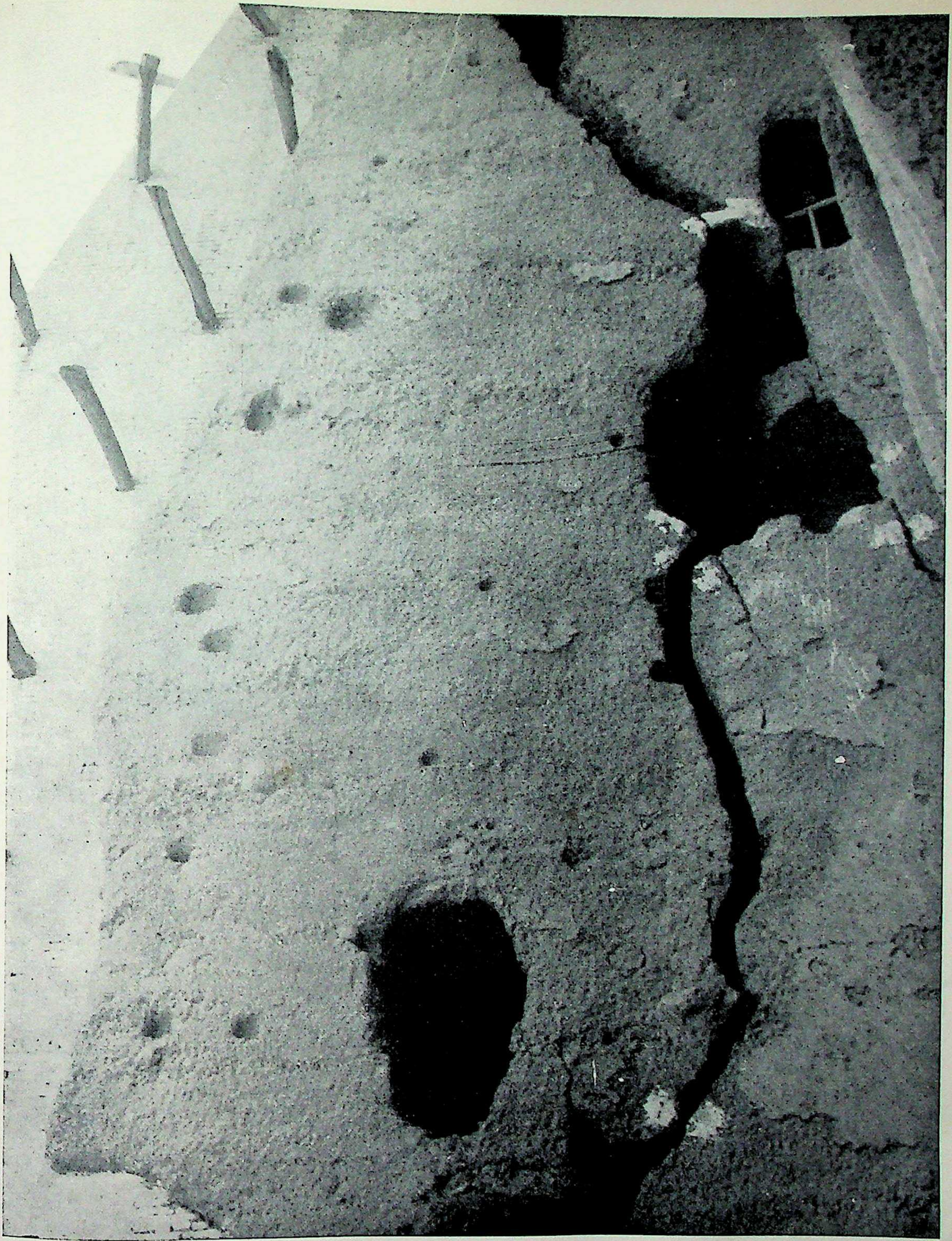


Fig. 53.

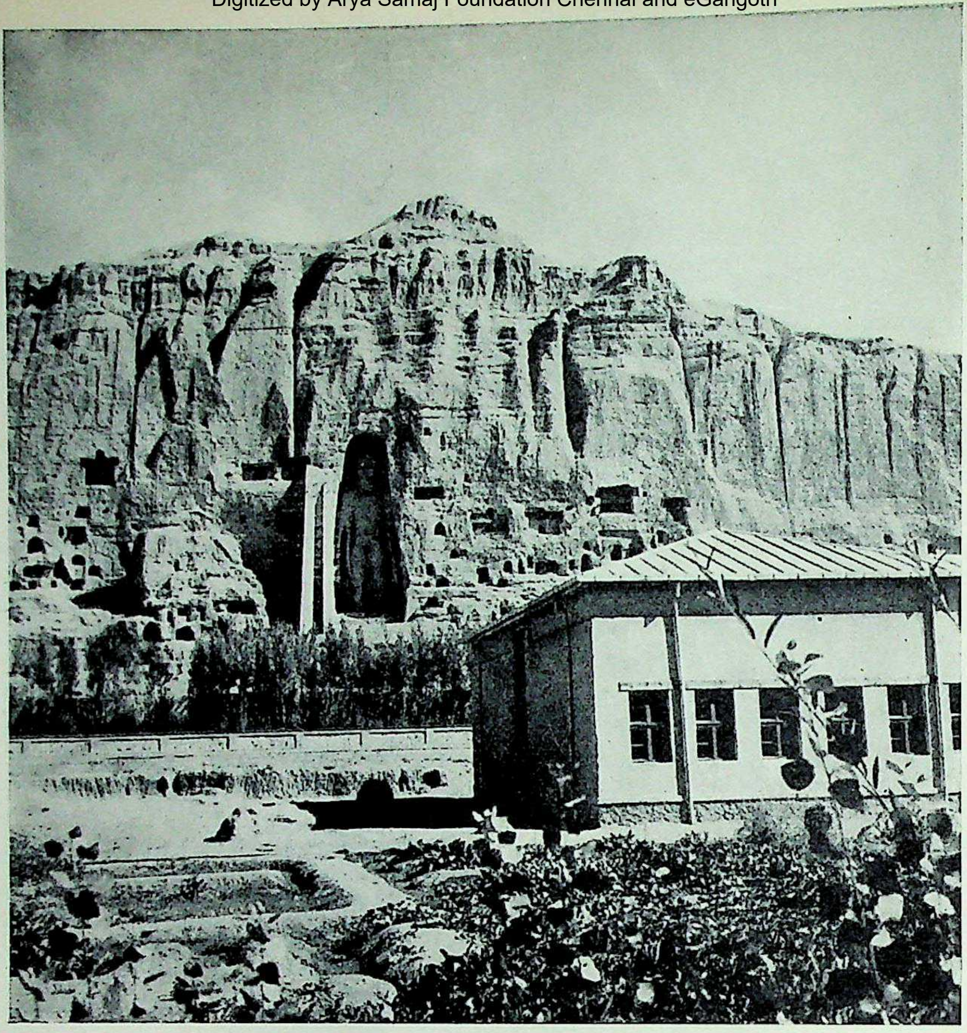


Fig. 54.

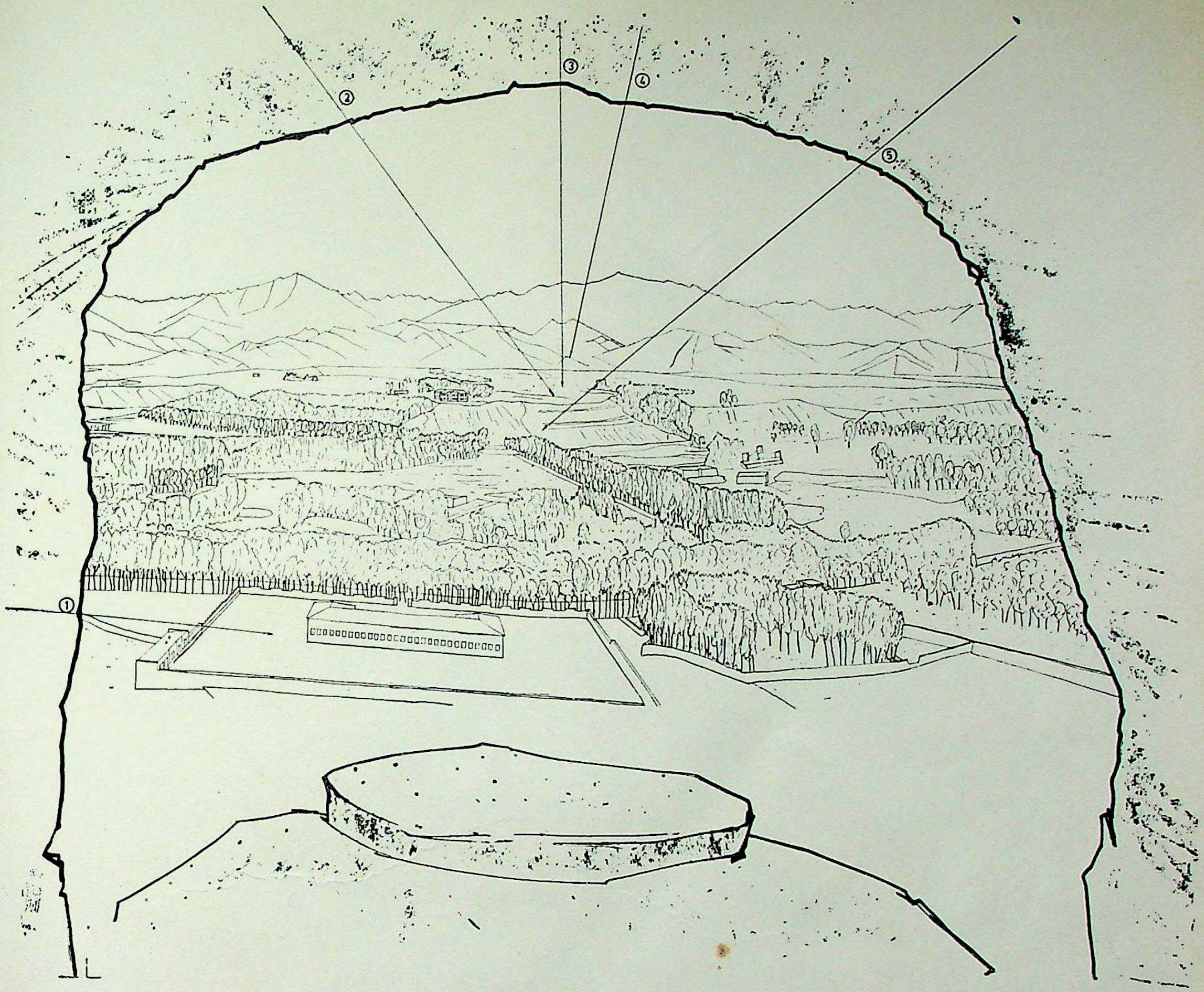

①
②
③
④
⑤

Fig. 55.

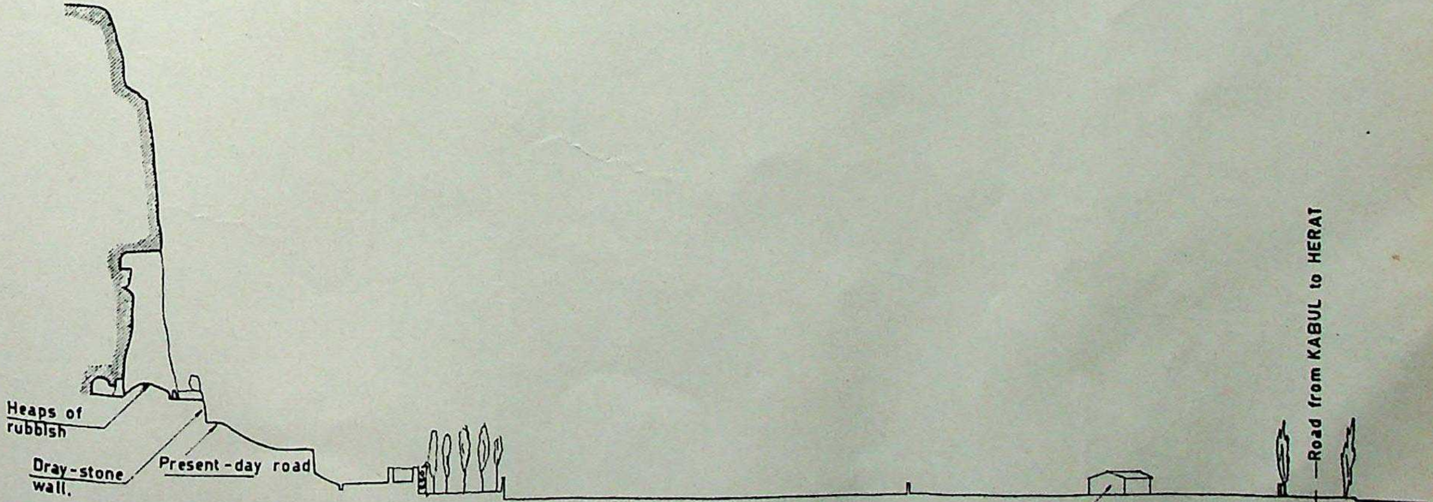

Heaps of rubbish
Dray-stone wall.
Present-day road
28.40
11.60
7.50
21.50
191.00
19.80
Existing school
Road from KABUL to HERAT

Fig. 56.

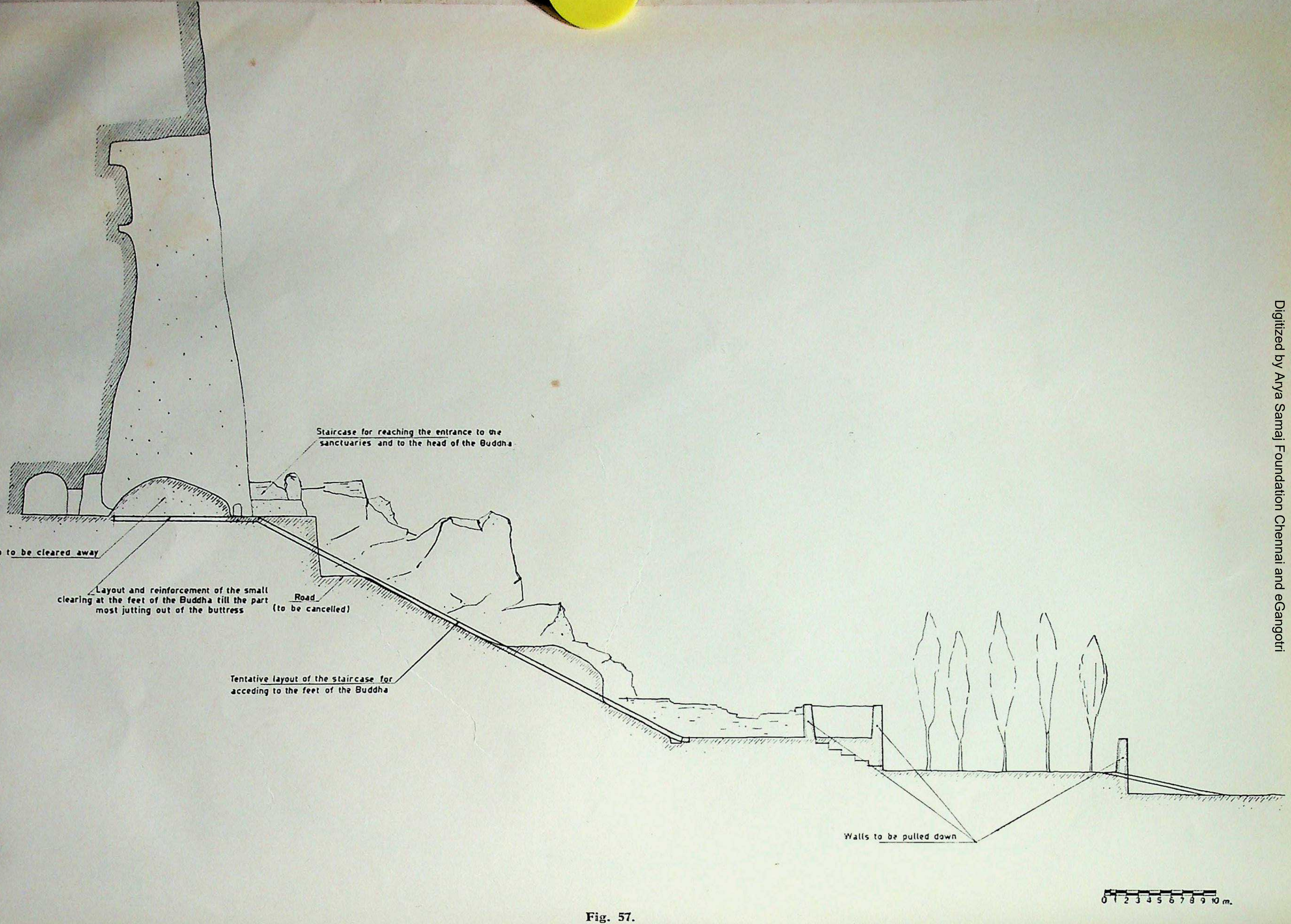

Staircase for reaching the entrance to the sanctuaries and to the head of the Buddha
Rubbish to be cleared away
Layout and reinforcement of the small clearing at the feet of the Buddha till the part most jutting out of the buttress
Road (to be cancelled)
Tentative layout of the staircase for acceding to the feet of the Buddha
Walls to be pulled down
0 1 2 3 4 5 6 7 8 9 10 m.

Fig. 57.

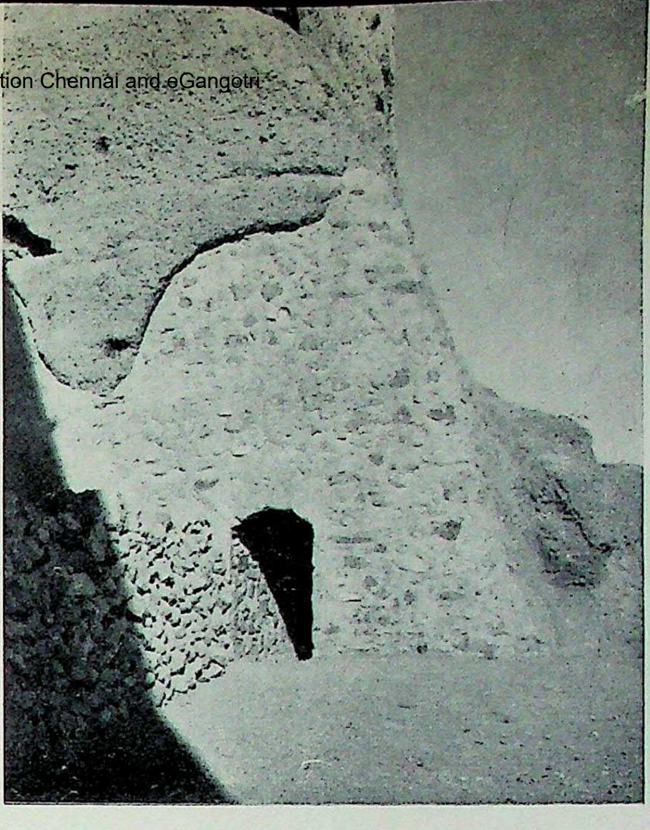
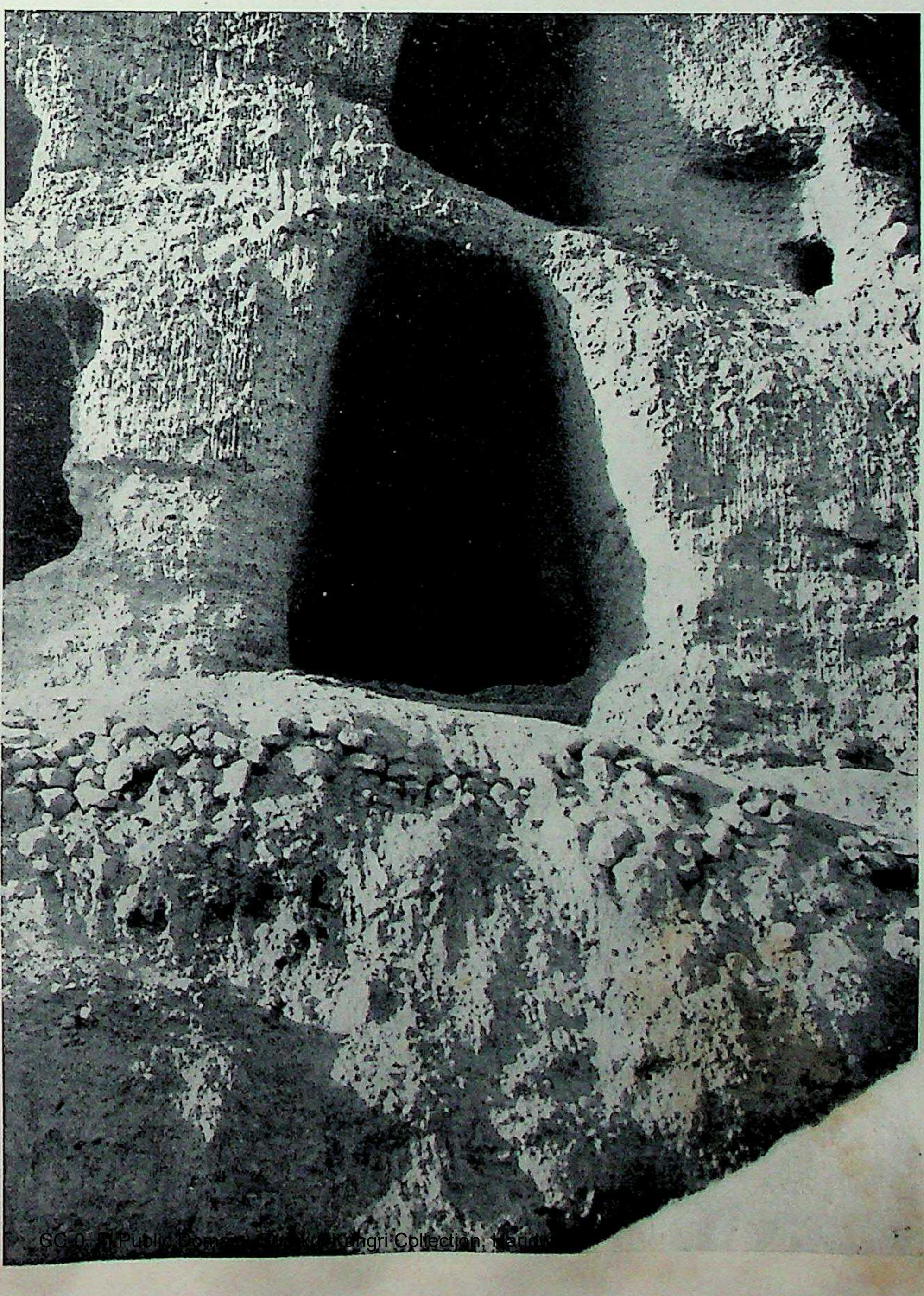


Fig. 58.

Fig. 59.



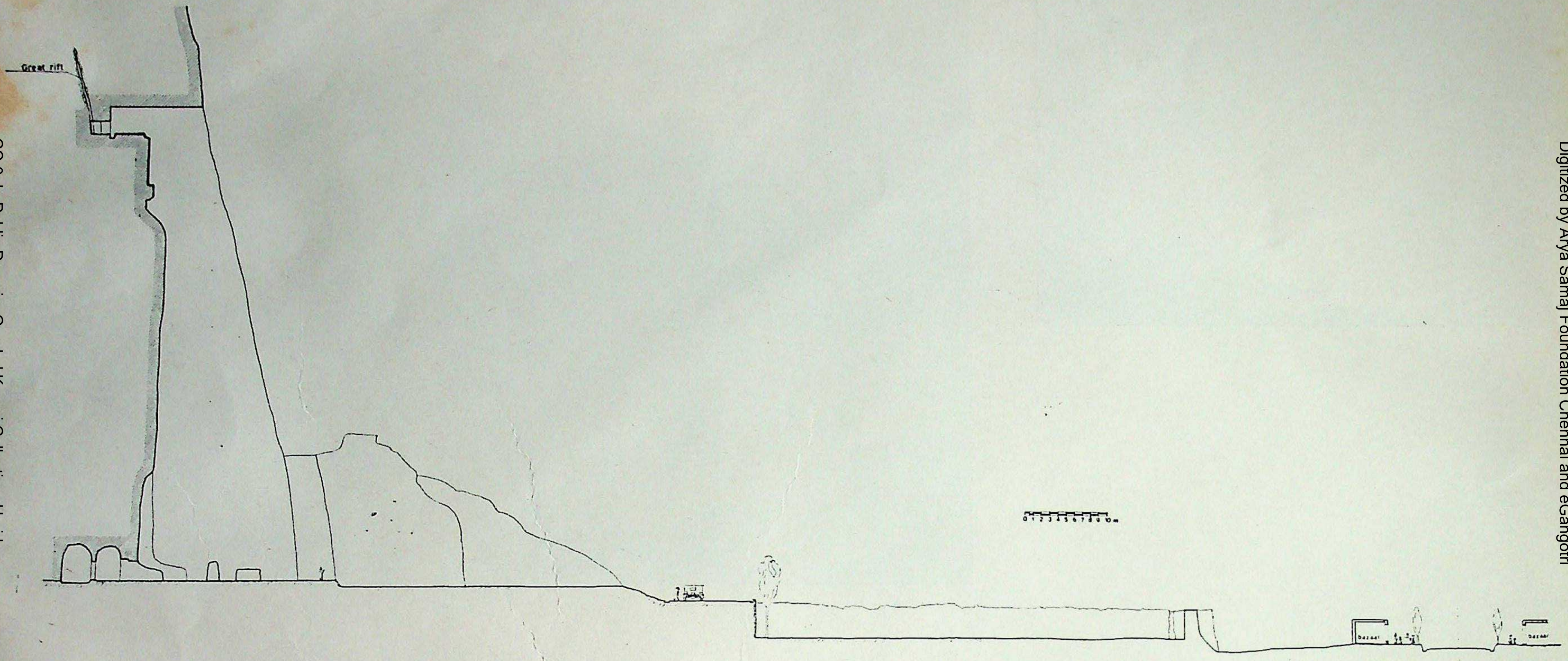

Great rift
0 1 2 3 4 5 6 7 8 9 10 m
bazaar
bazaar

Fig. 60.

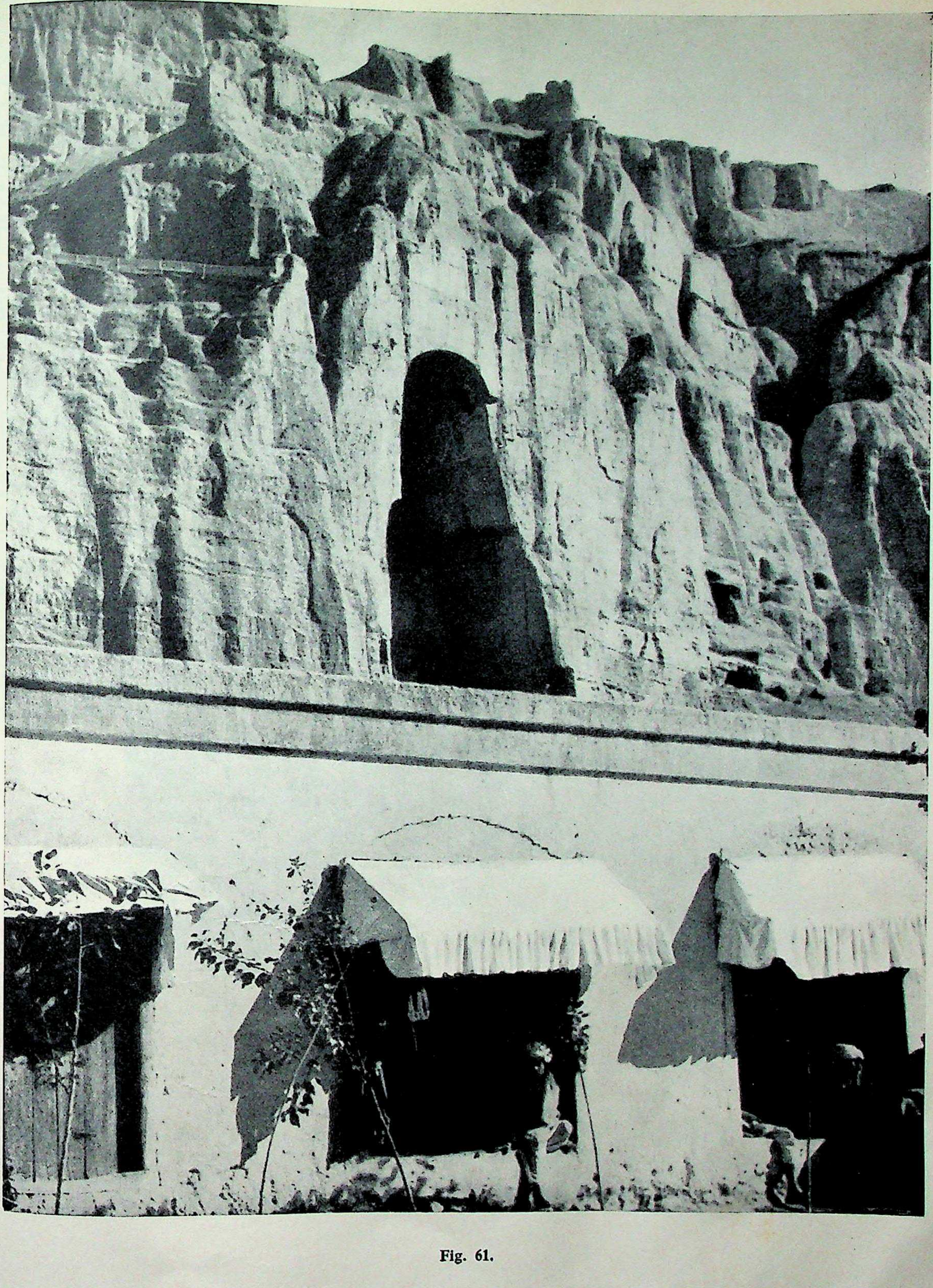


Fig. 61.

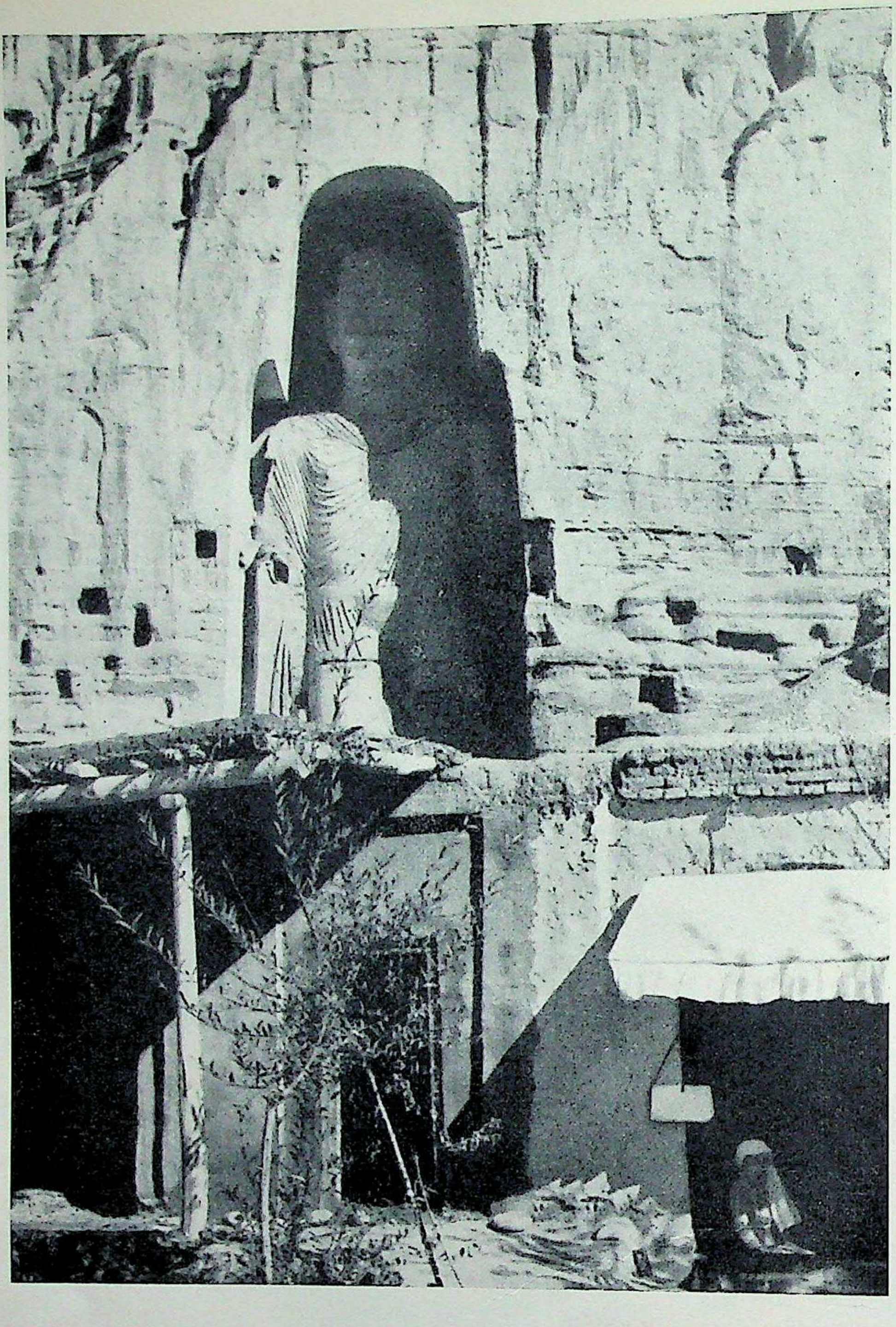


Fig. 62.

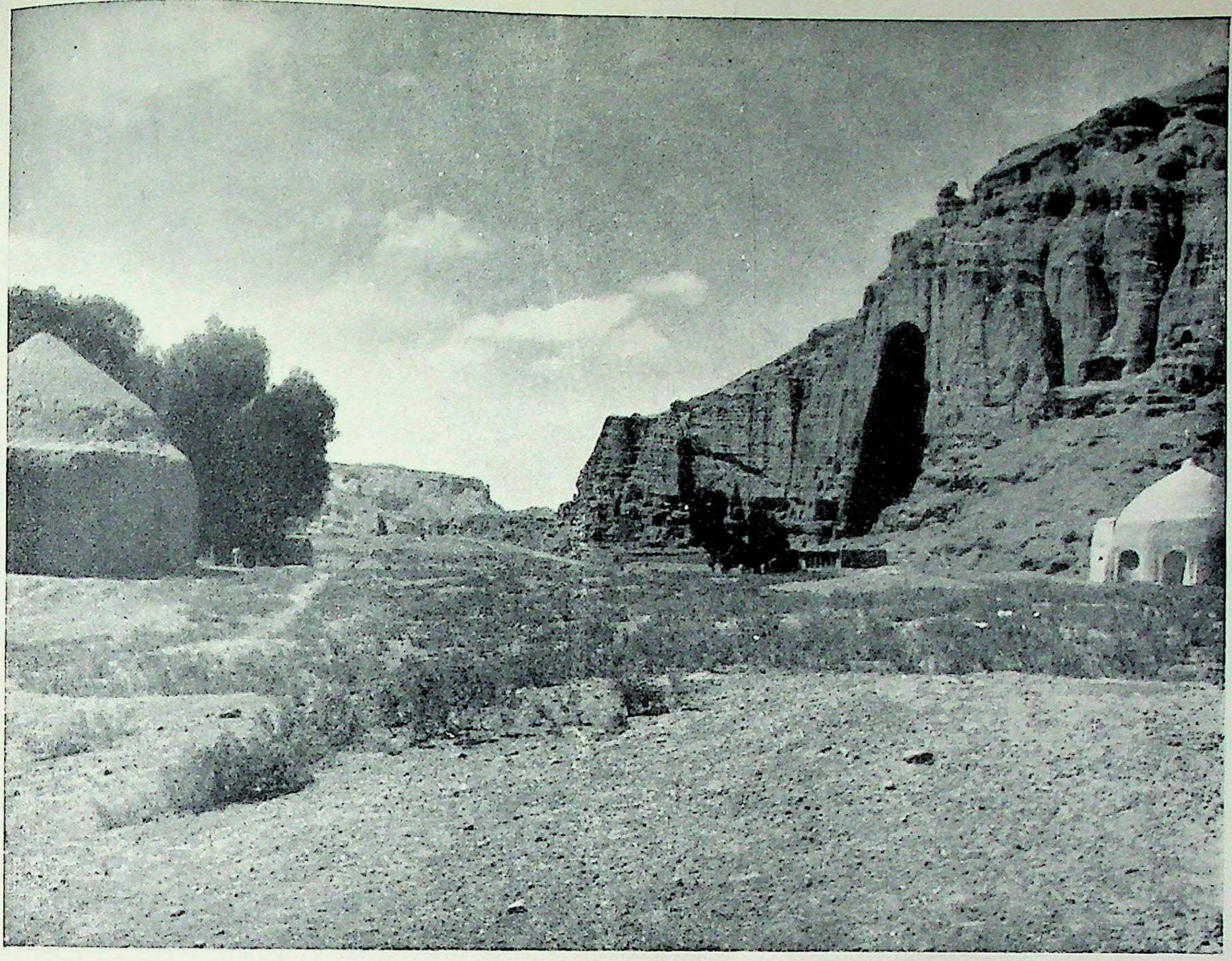


Fig. 63.

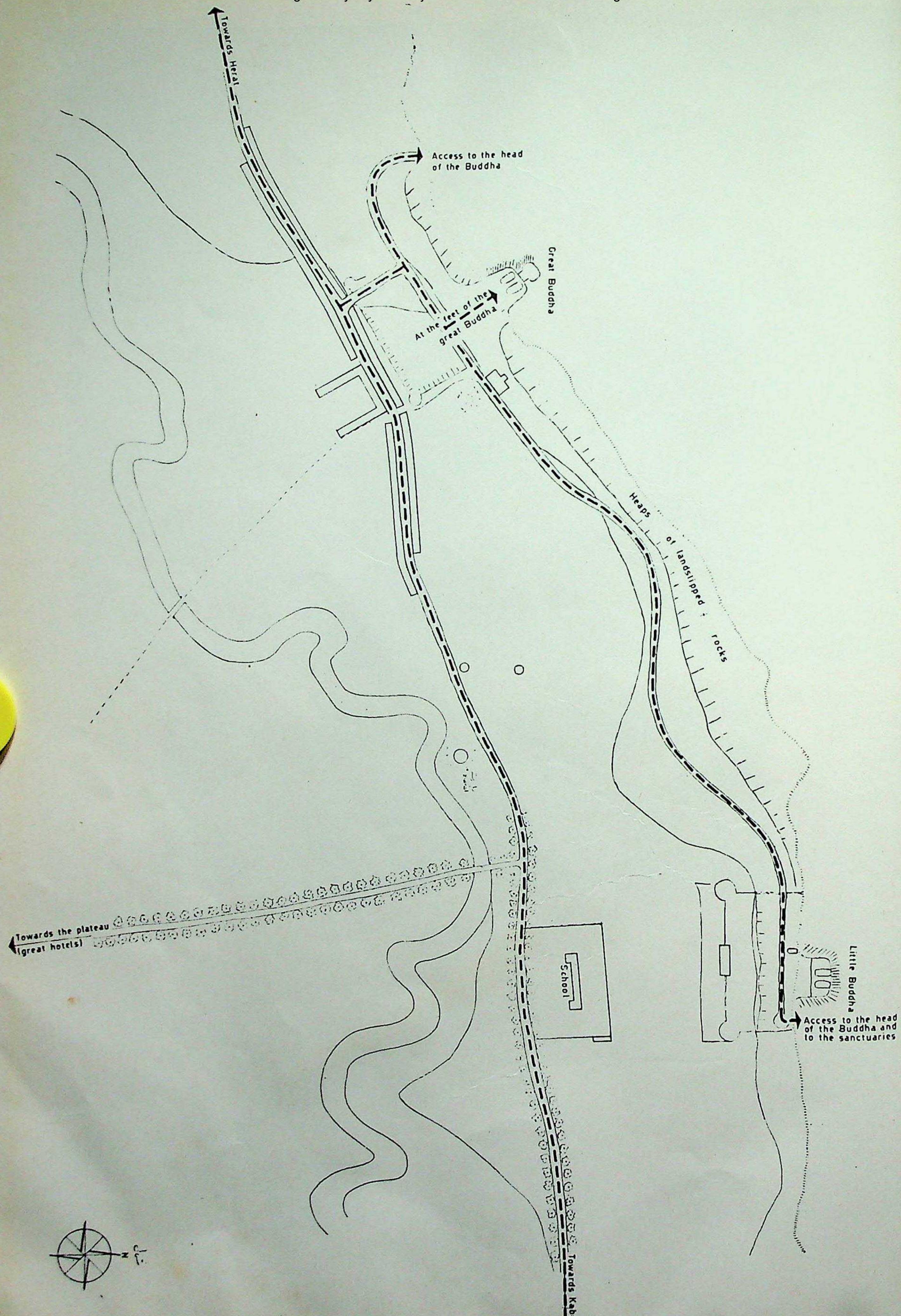

Towards Herat
Access to the head of the Buddha
Great Buddha
At the feet of the great Buddha
Heaps of landslipped rocks
Towards the plateau (great hotels)
School
Little Buddha
Access to the head of the Buddha and to the sanctuaries
Towards Kabul
N

Fig. 64.

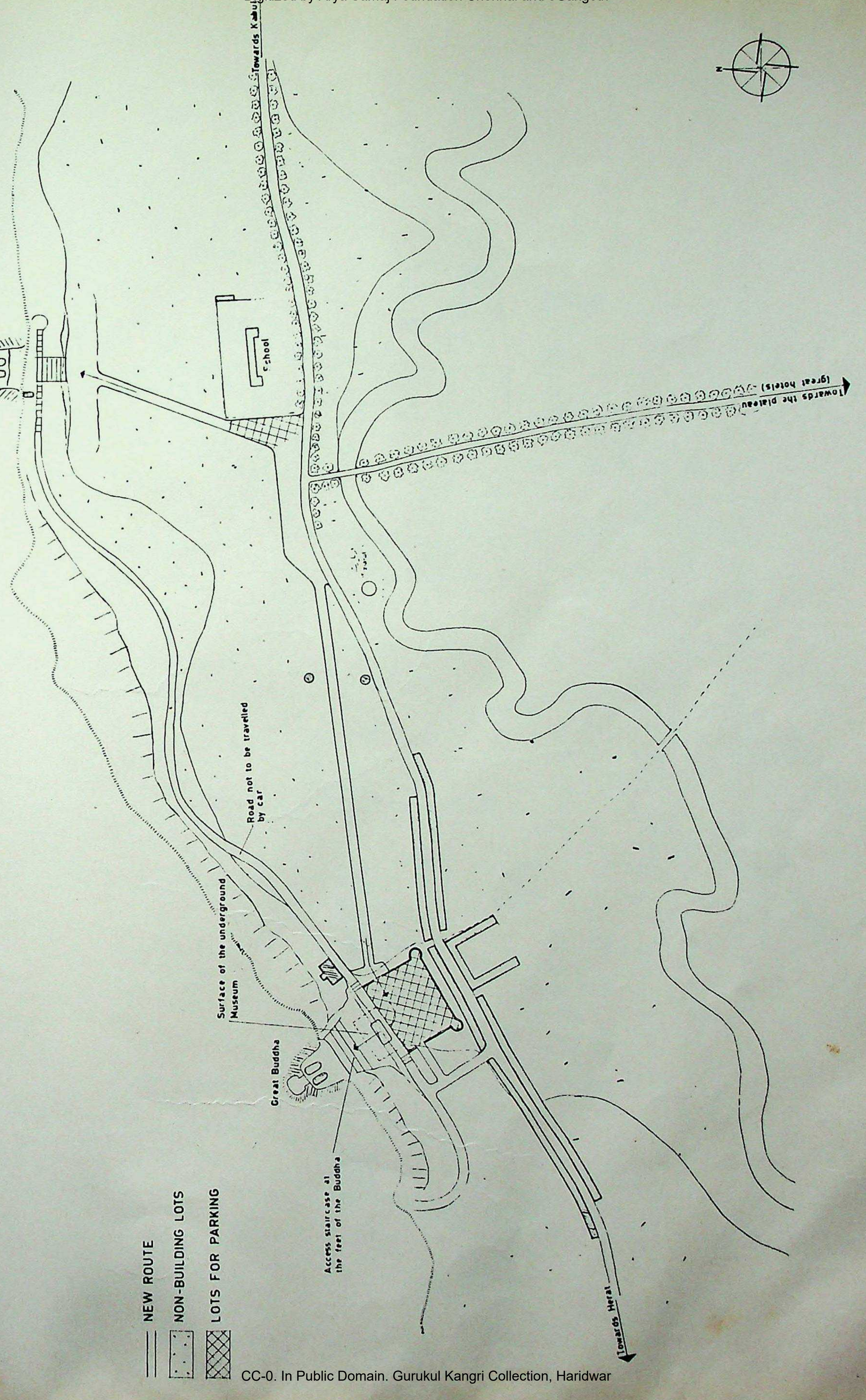

Towards Kabul
N
Little Buddha
School
Towards the plateau (great hotels)
Road not to be travelled by car
Surface of the underground Museum
Great Buddha
Access staircase at the feet of the Buddha
Towards Herat
NEW ROUTE
NON-BUILDING LOTS
LOTS FOR PARKING

Fig. 65.

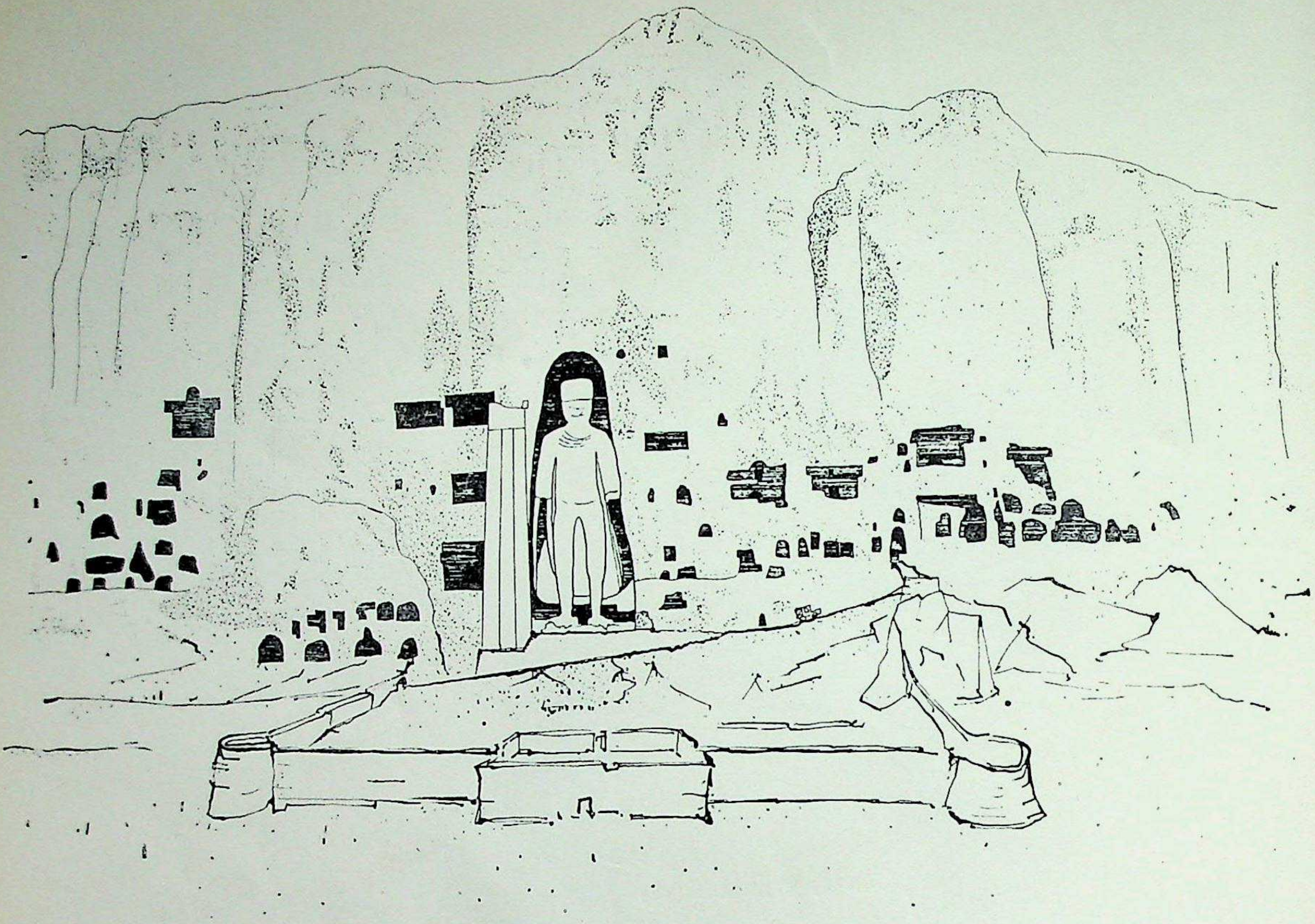


Fig. 66.

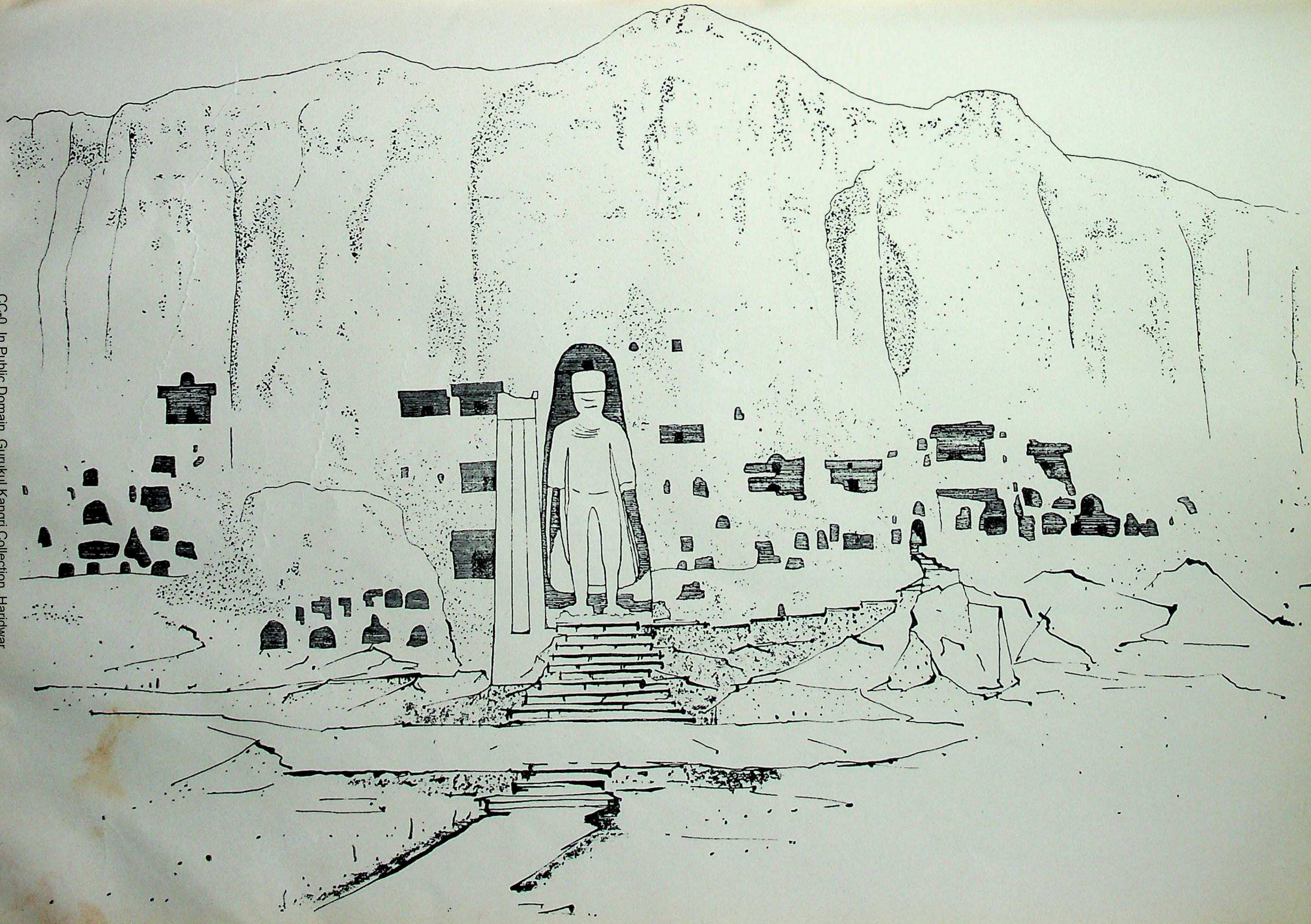


Fig. 57.

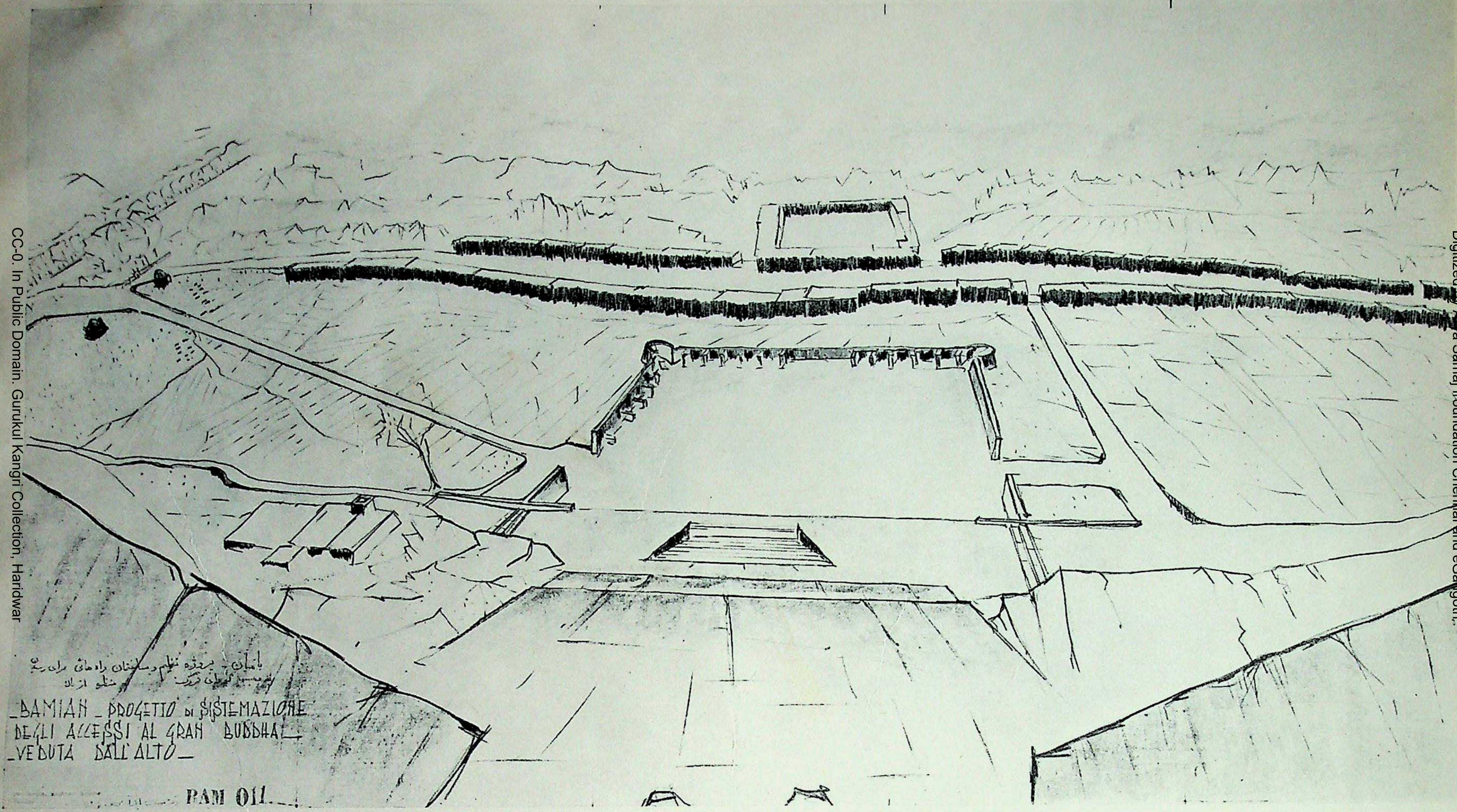

_BAMIAN _ PROGETTO DI SISTEMAZIONE
DEGLI ACCESSI AL GRAN BUDDHA_
VEDUTA DALL'ALTO
BAM 011

Fig. 68.

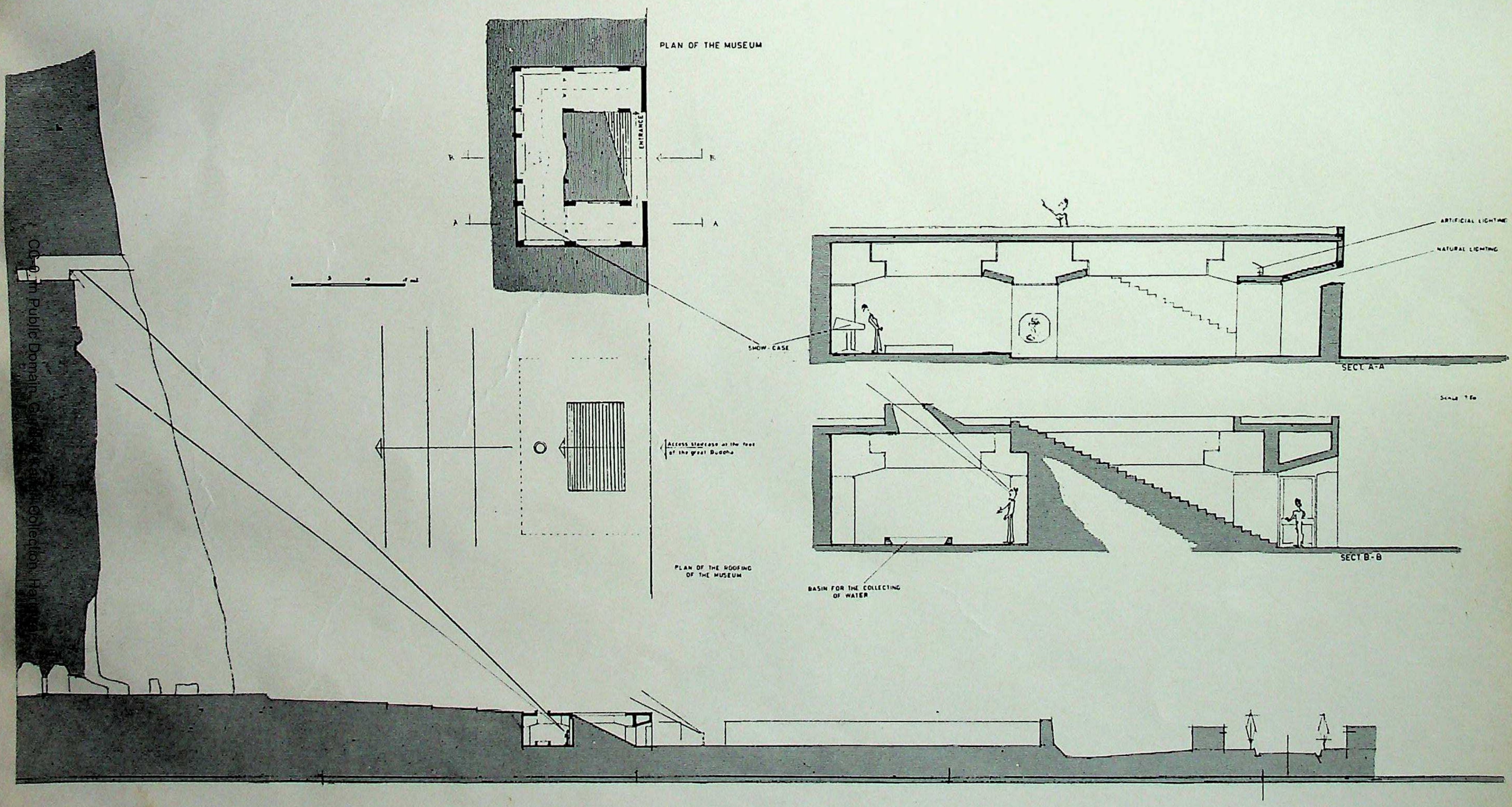

PLAN OF THE MUSEUM
ENTRANCE
B
B
A
A
SHOW-CASE
ARTIFICIAL LIGHTING
NATURAL LIGHTING
SECT. A-A
Scale 1:50
SECT. B-B
Access staircase at the feet of the great Buddha
PLAN OF THE ROOFING OF THE MUSEUM
BASIN FOR THE COLLECTING OF WATER

Fig. 69.

]

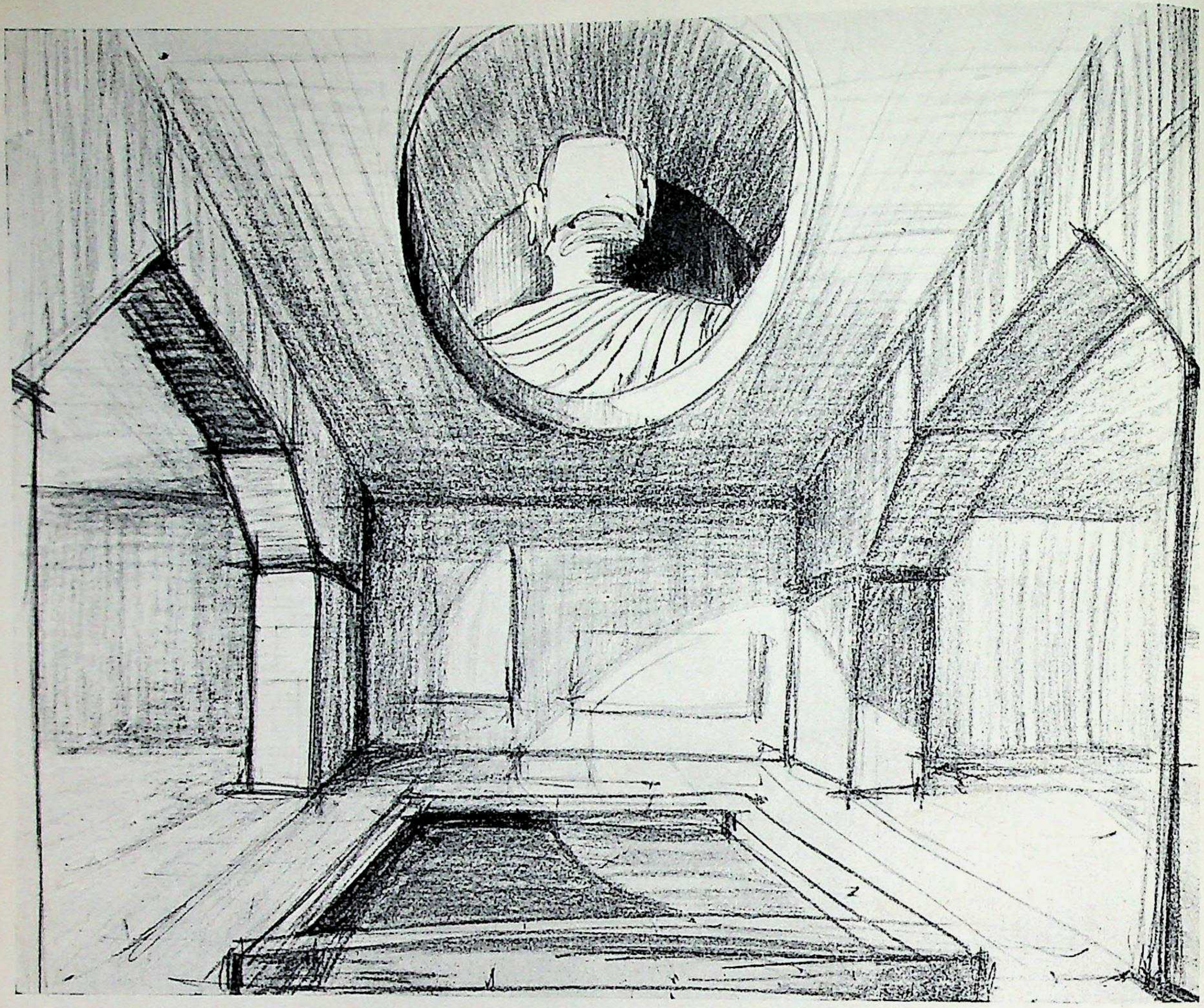


Fig. 70.

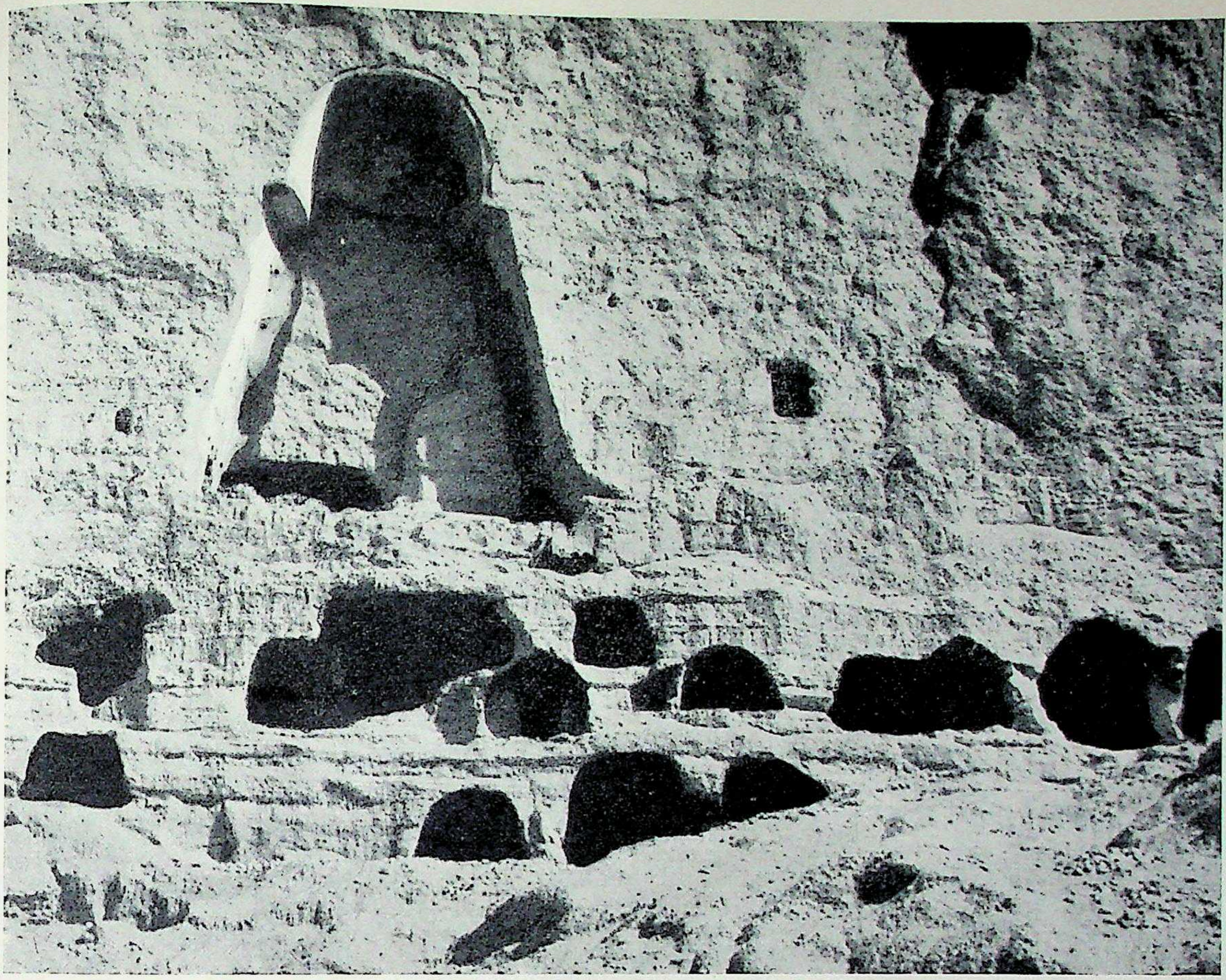


Fig. 71.

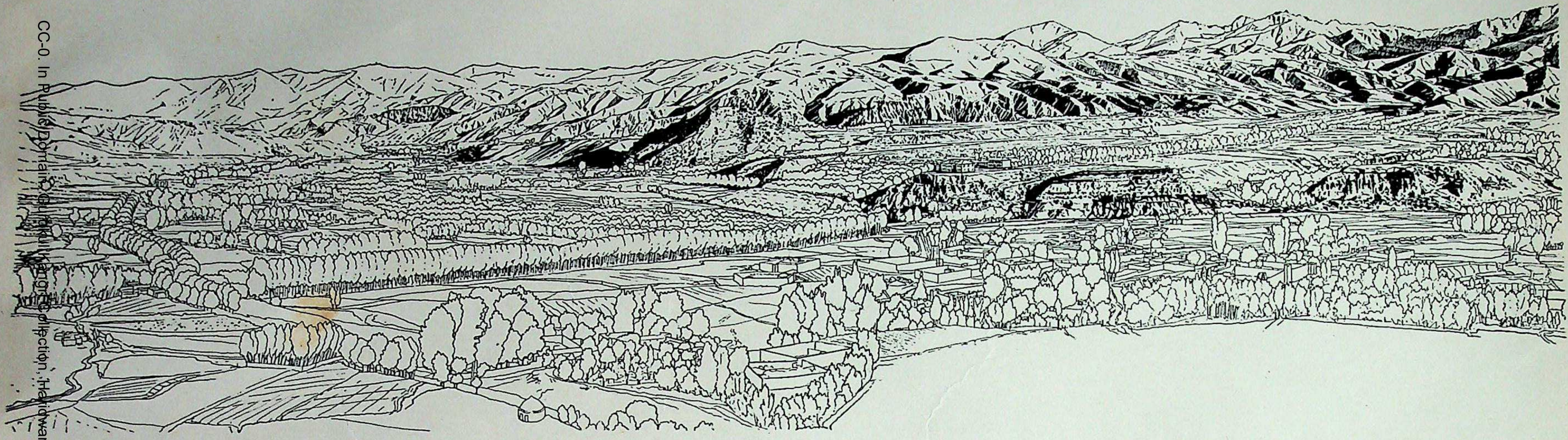


Fig. 72.

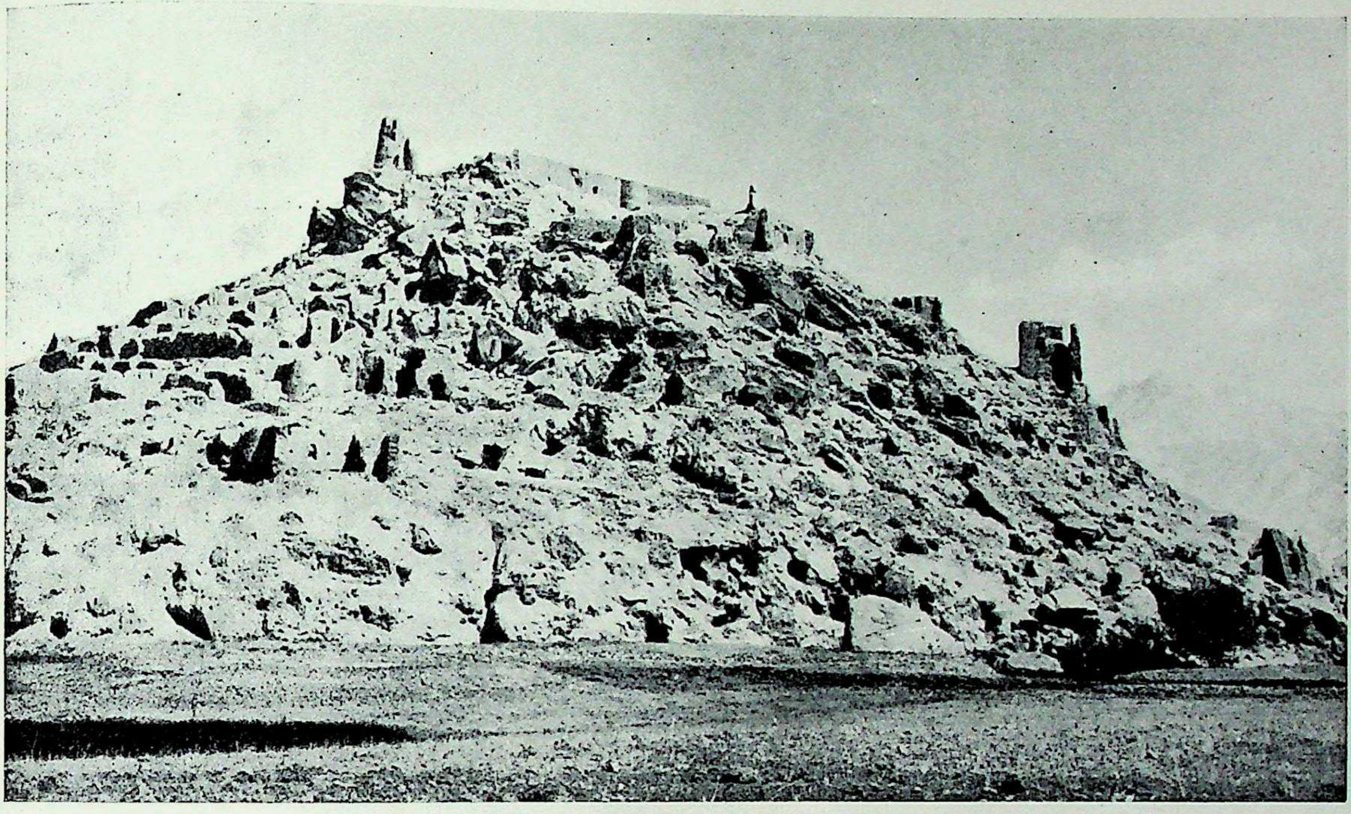
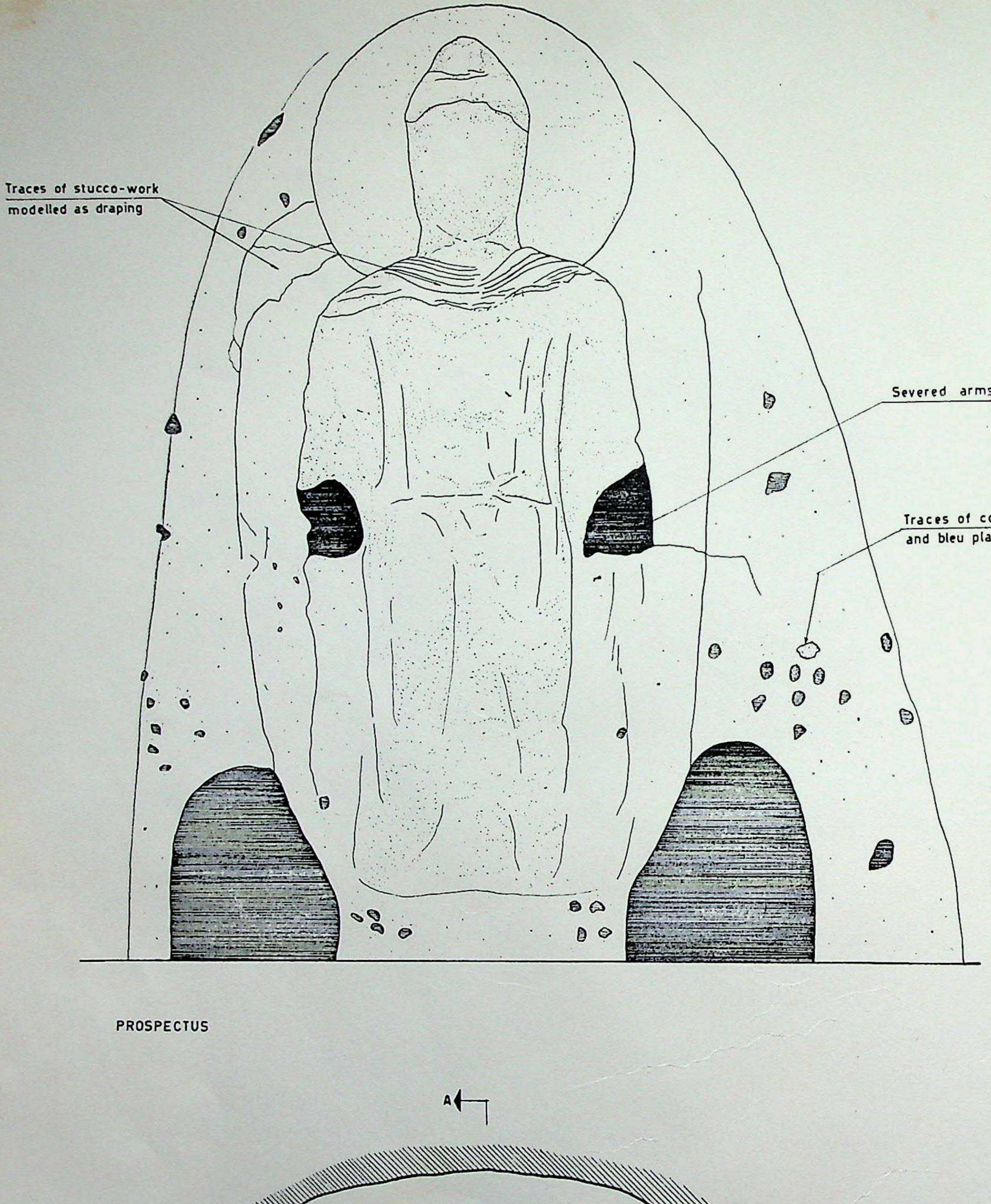
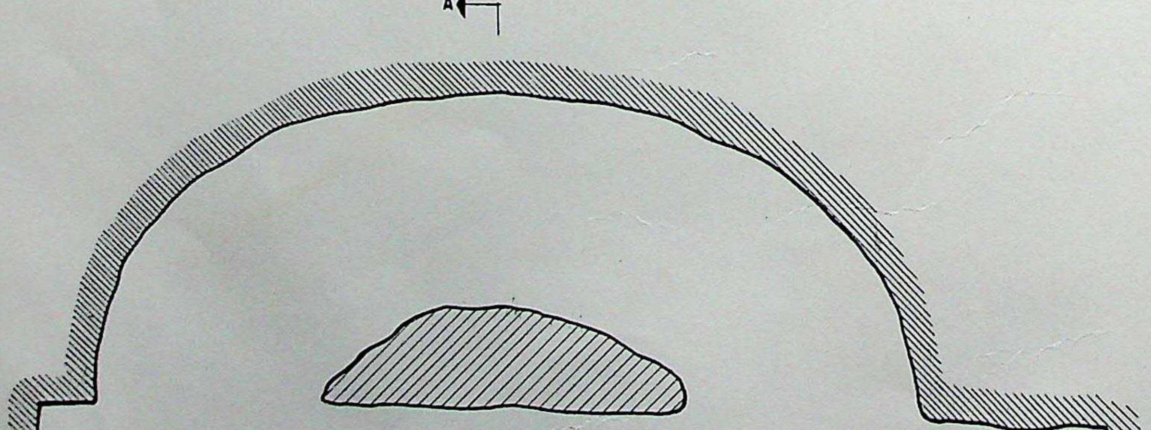


Fig. 73.

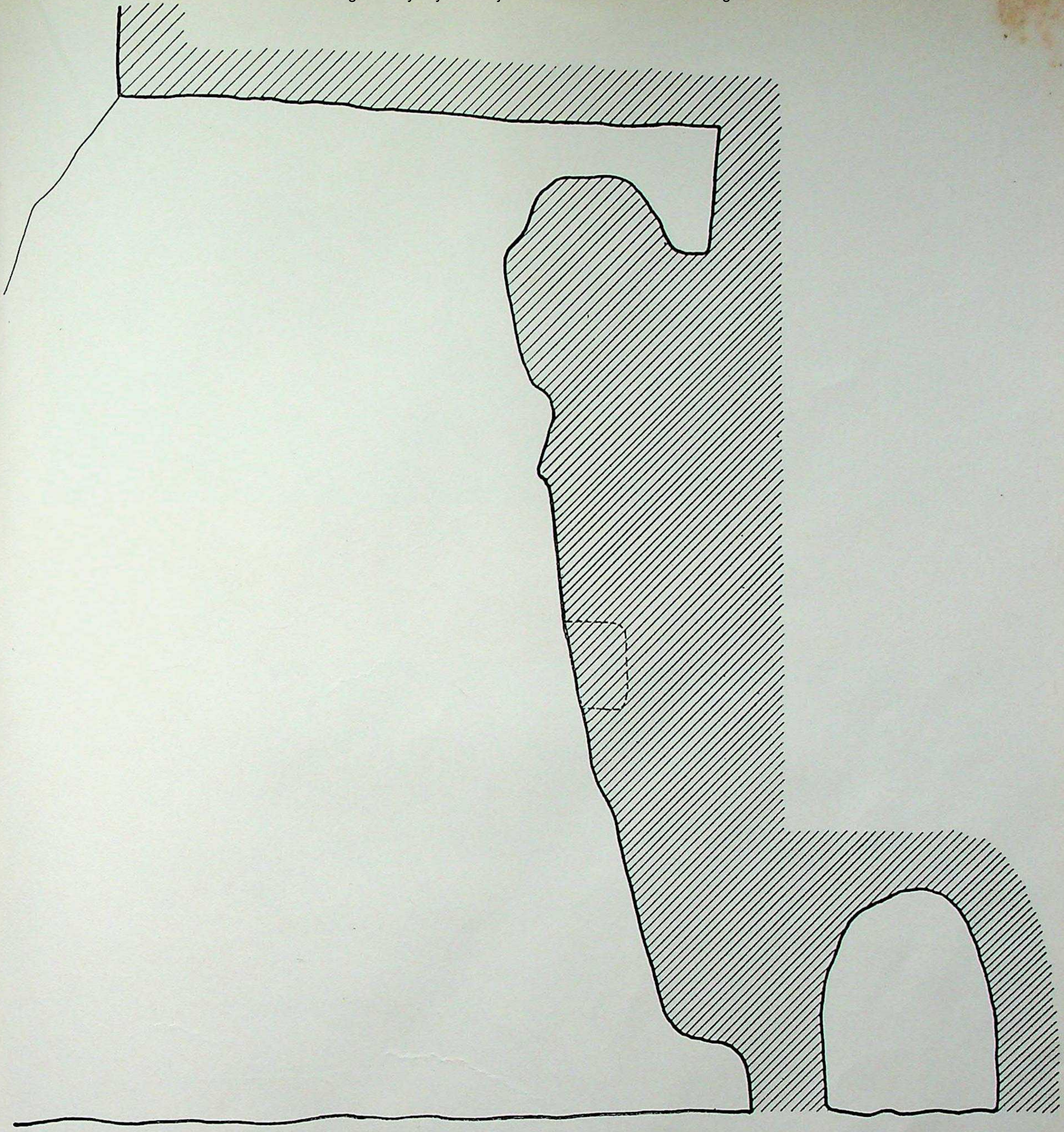

Traces of stucco-work modelled as draping
Severed arms
Traces of coloured red and bleu plastering

PROSPECTUS



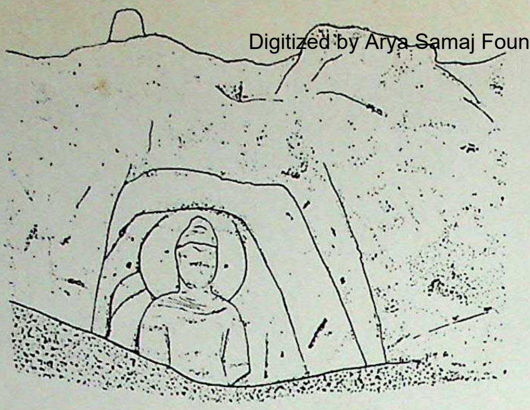
PLAN AT THE BASE

Fig. 74.

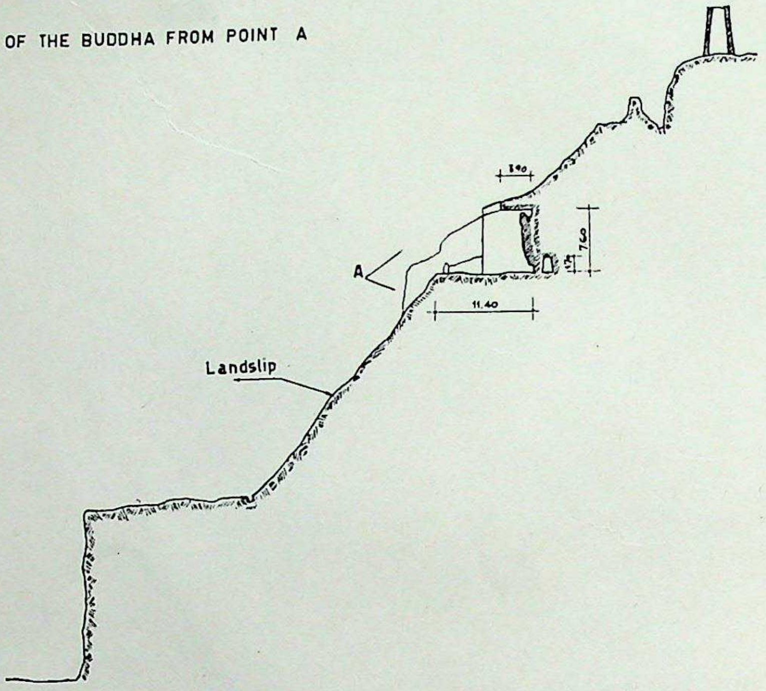


TOTAL HEIGHT OF THE NICHE M. 7.60
INTERNAL HEIGHT OF THE UNDERGROUND PASSAGE M. 1.70
TRANSVERSE SECTION A-A

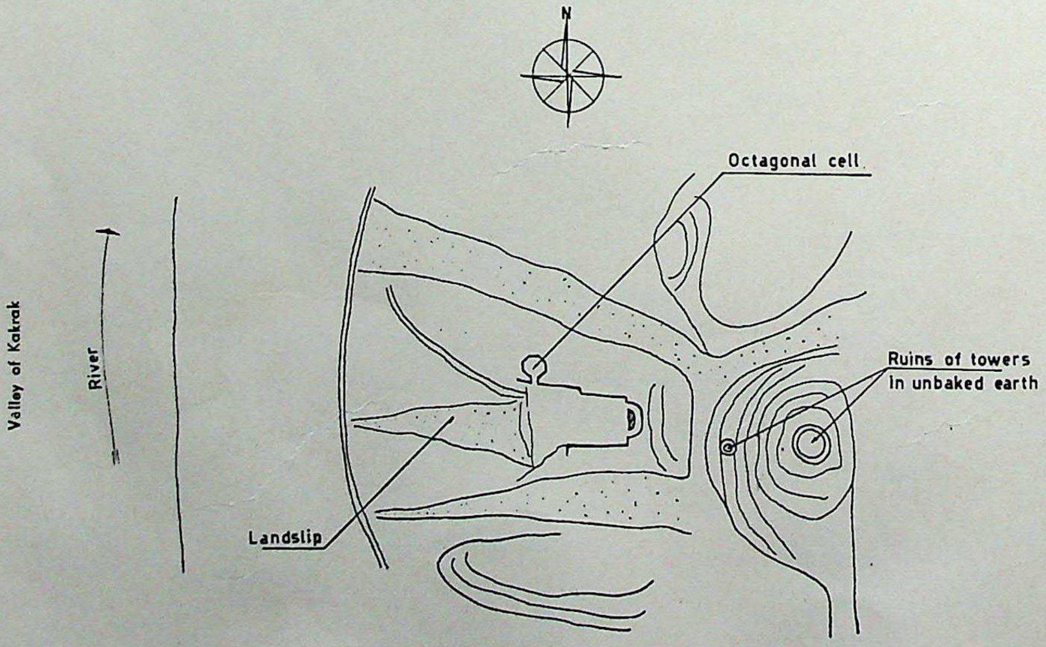
Fig. 75.



VIEW OF THE NICHE OF THE BUDDHA FROM POINT A


1.90
7.60
1.75
11.40
A
Landslip

SECTION ON THE AXIS OF THE BUDDHA 1:500


N
Octagonal cell
Ruins of towers
in unbaked earth
Valley of Kakrak
River
Landslip

PLANIMETRIC SKETCH OF THE NICHE OF THE BUDDHA AND ENVIRONS.

Fig. 76.

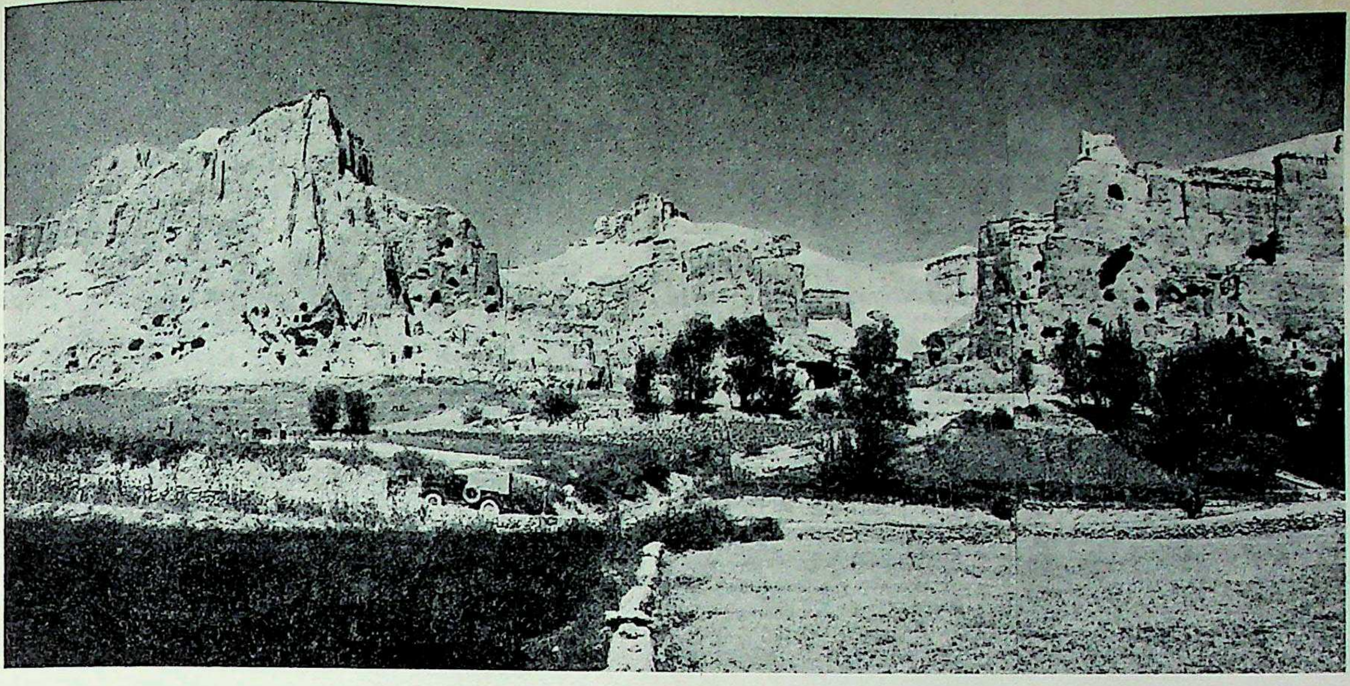


Fig. 77.

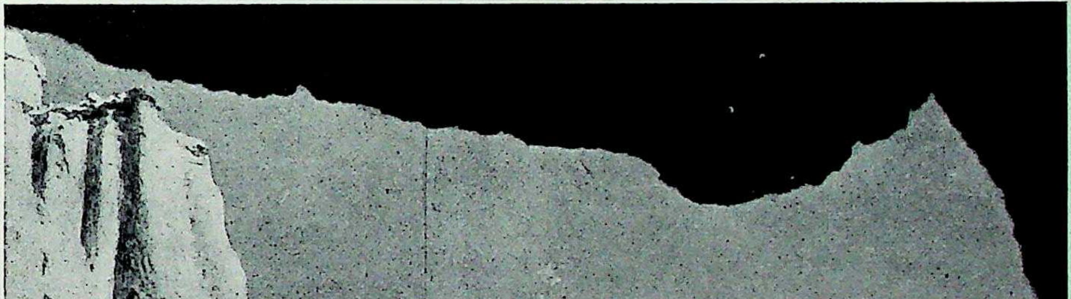


Fig. 78.

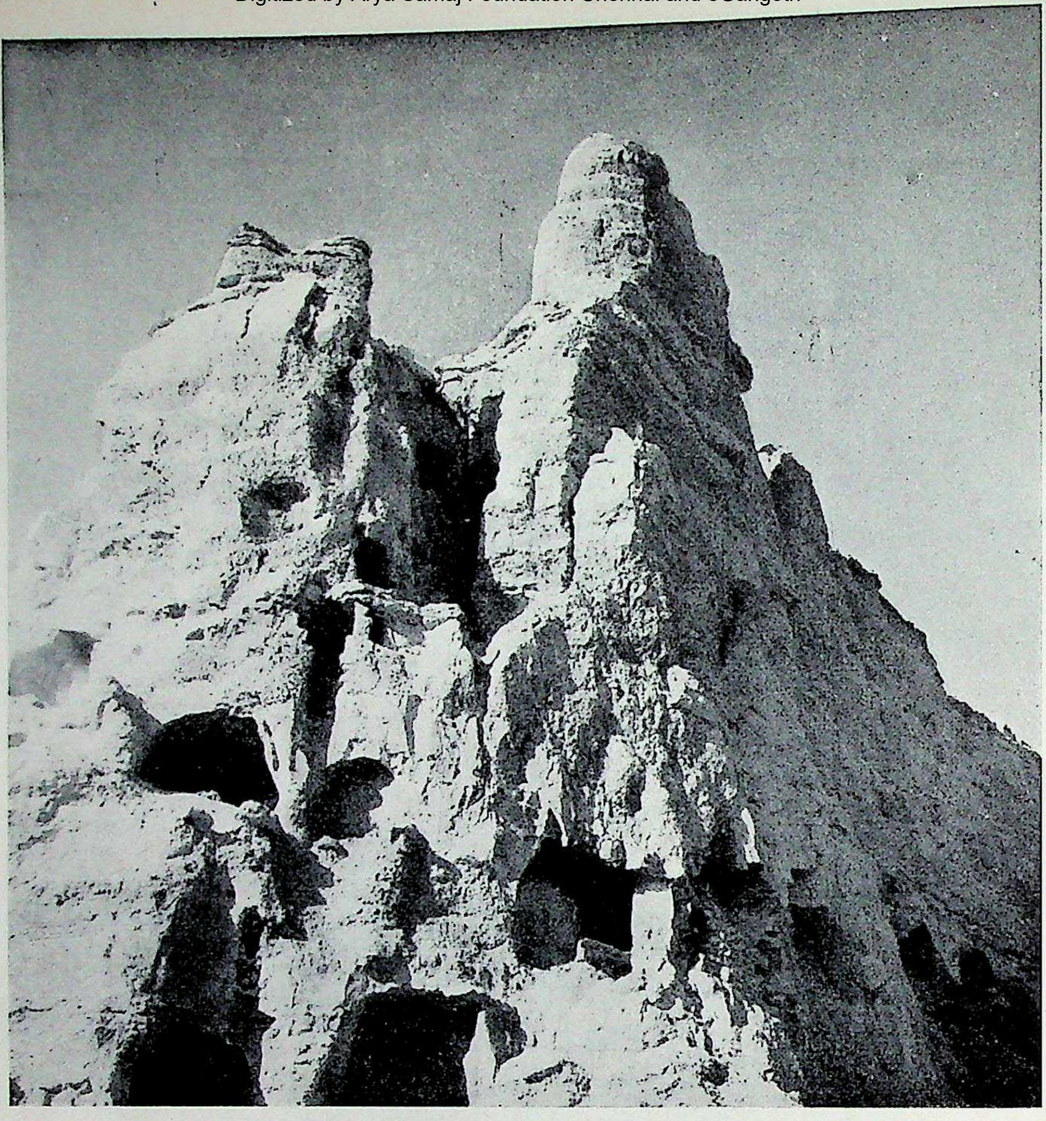


Fig. 79.

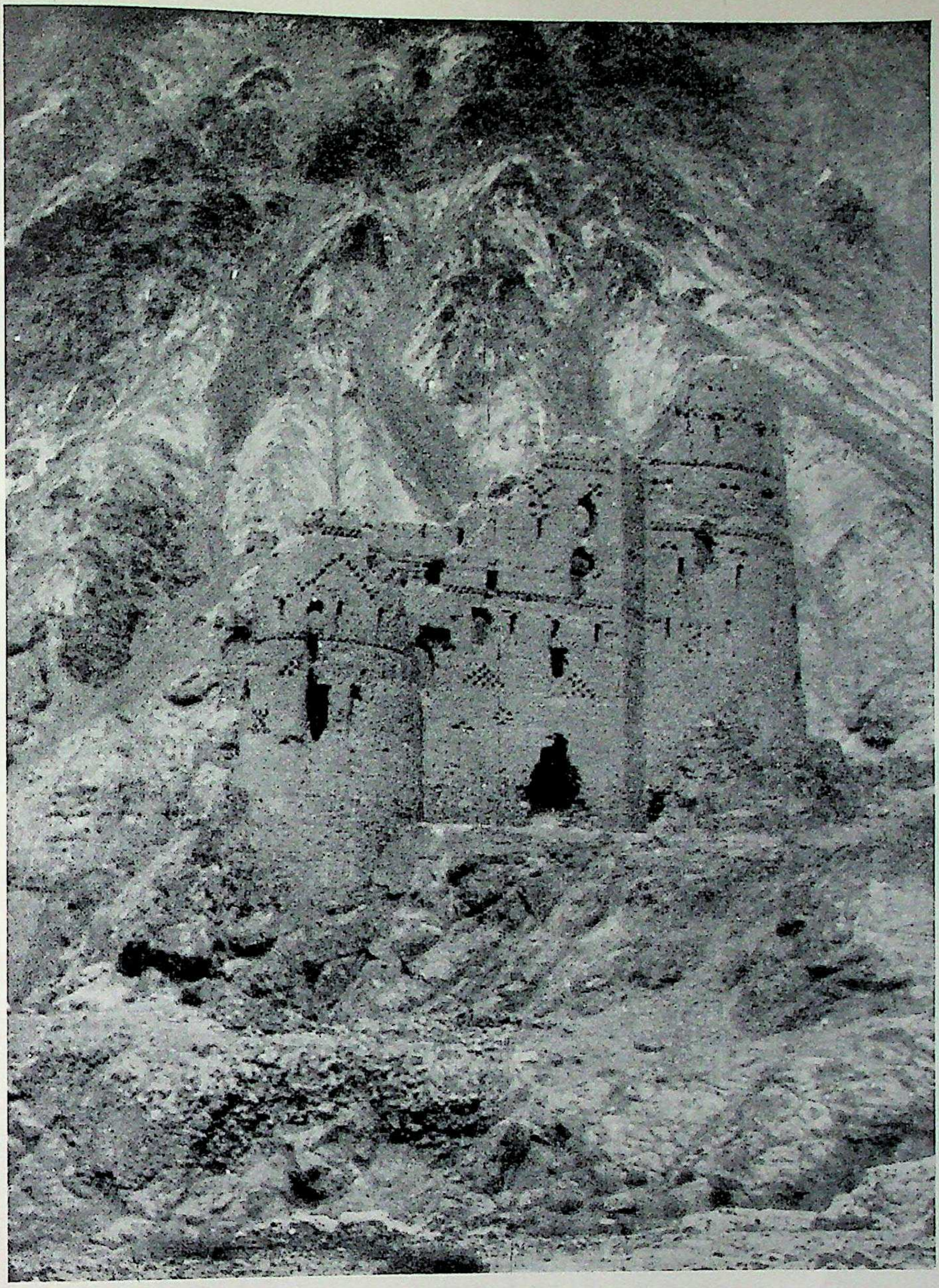


Fig. 80.

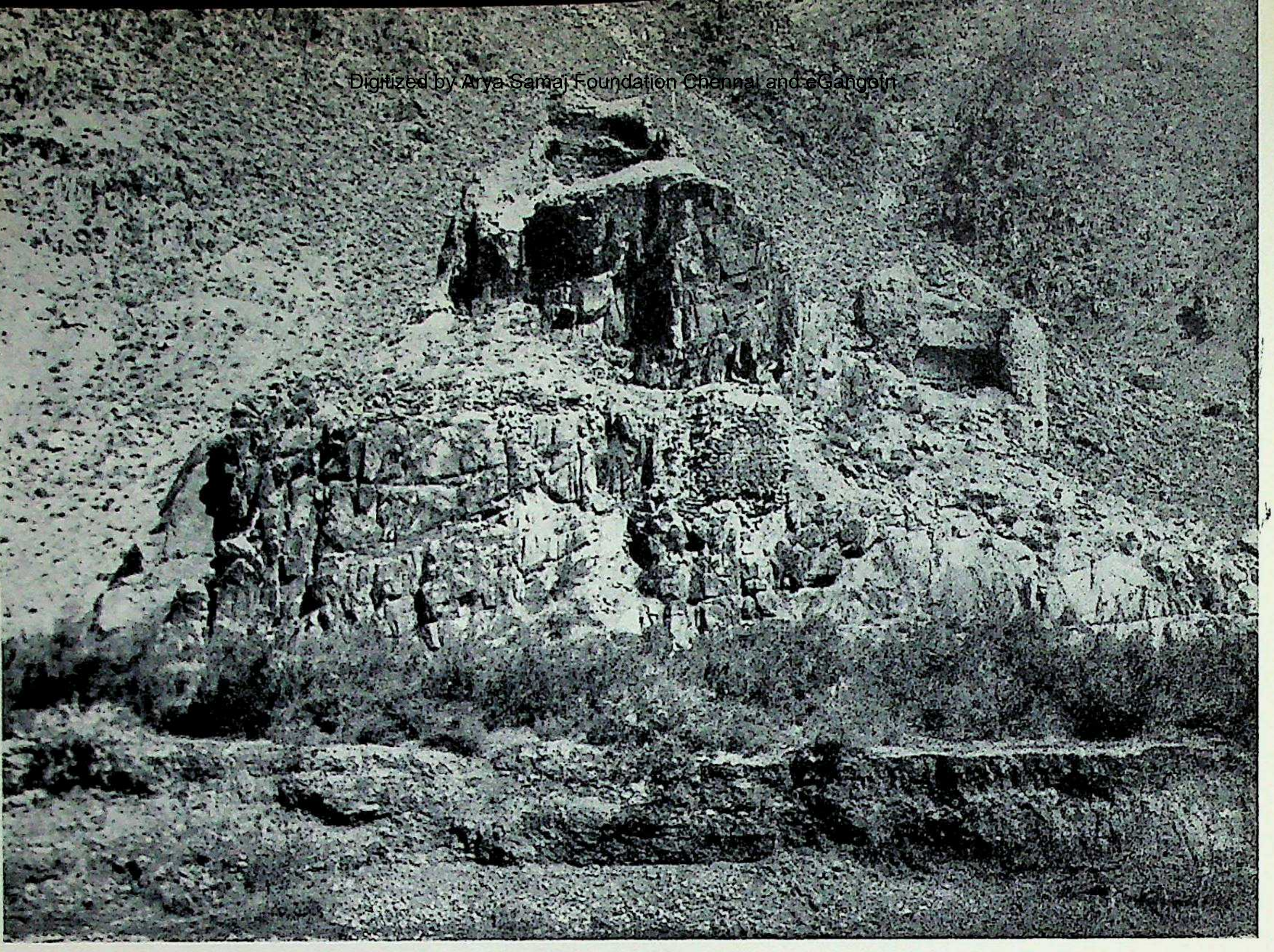
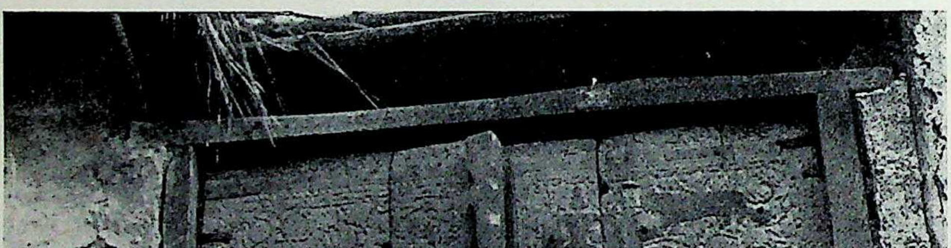


Fig. 81.

Fig. 82.



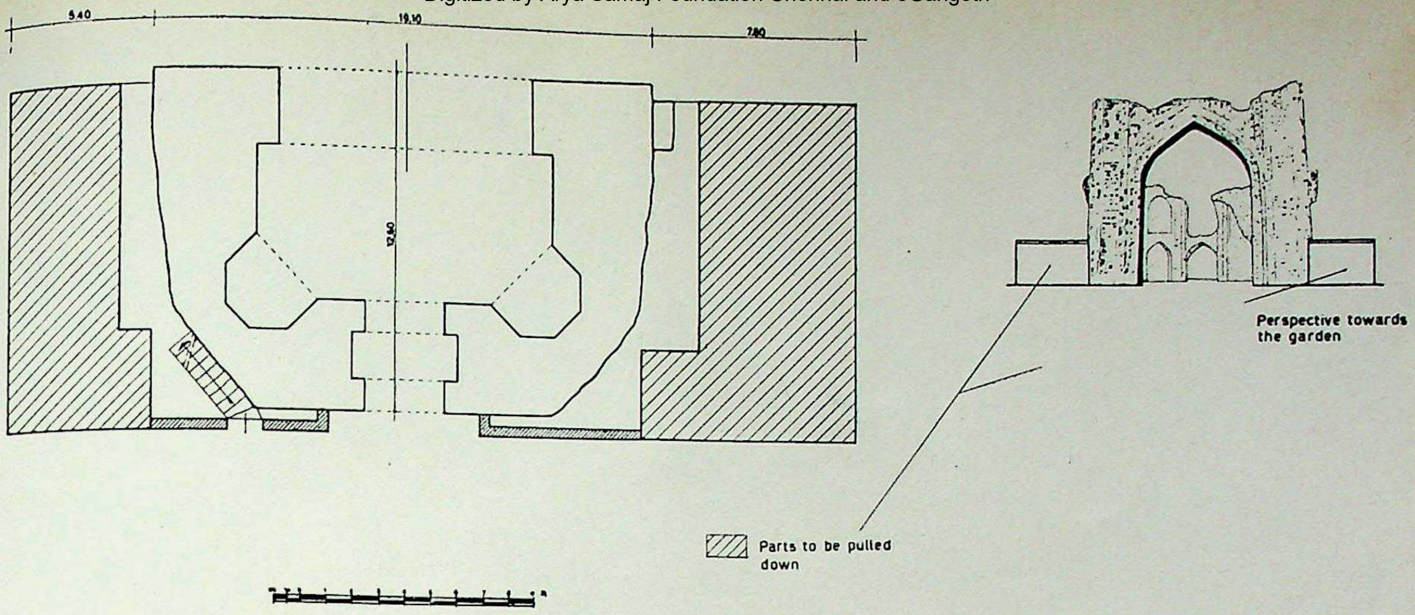

5.40
19.10
7.80
12.50
Perspective towards the garden
▨ Parts to be pulled down

Fig. 83.

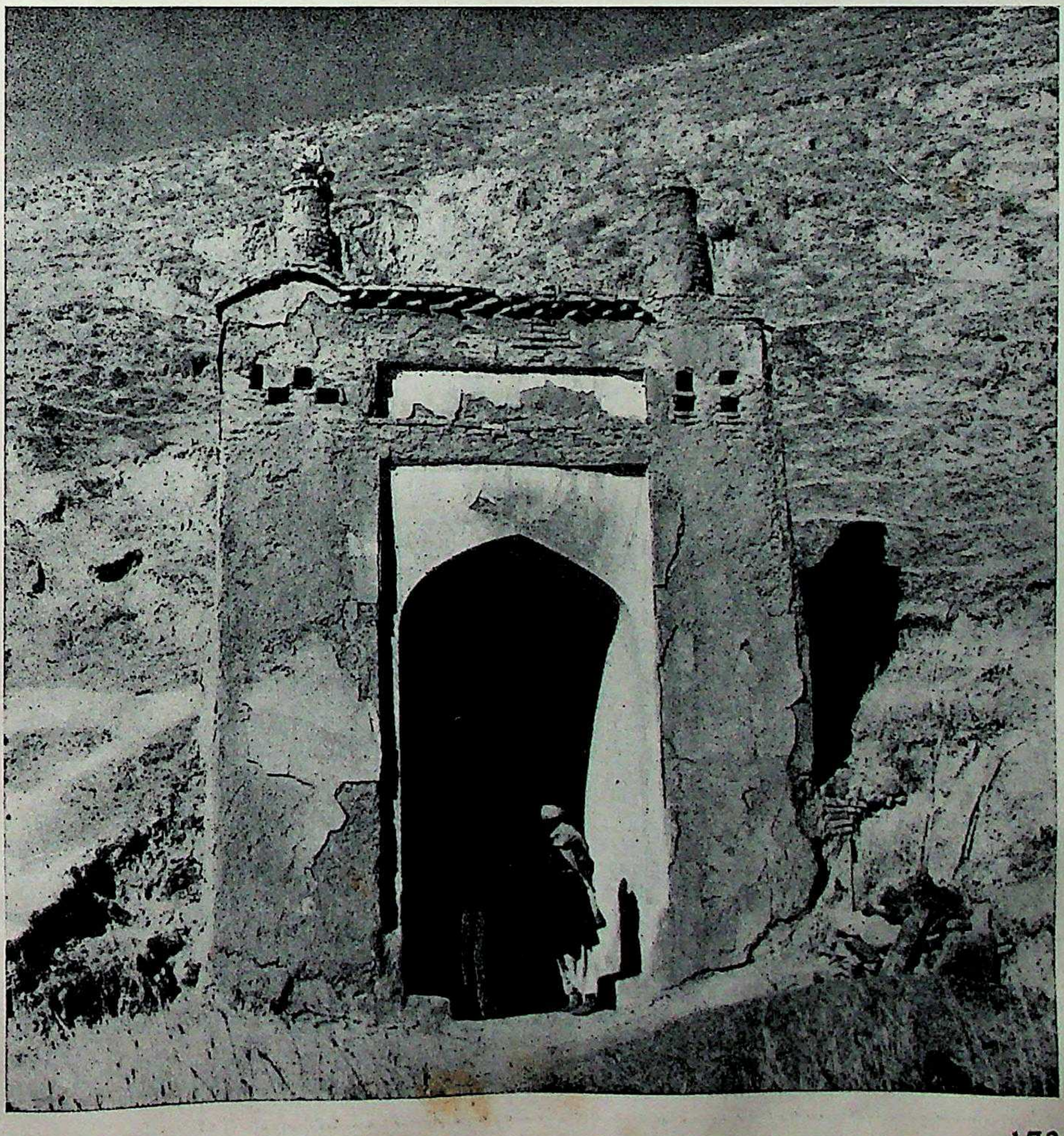


Fig. 84.

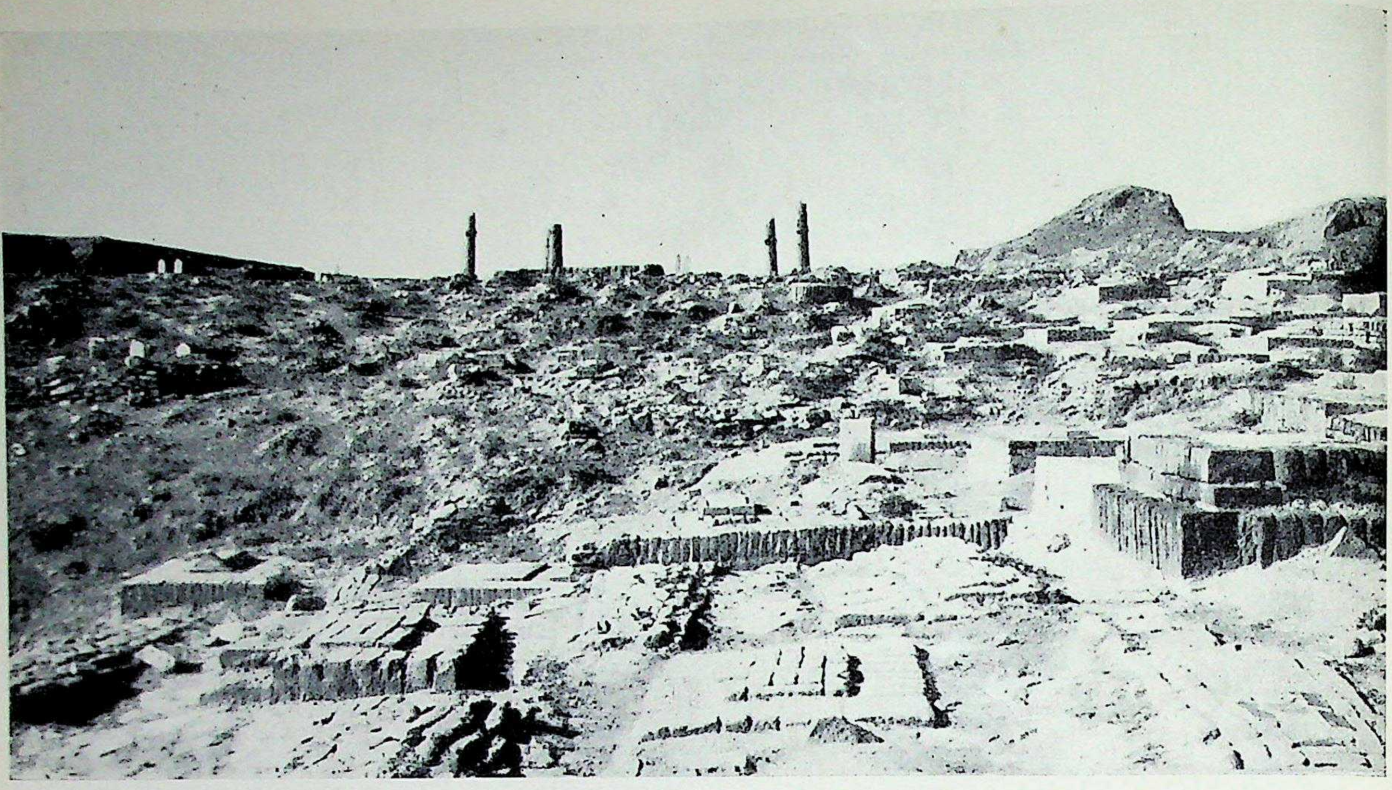


Fig. 85.

Fig. 86.

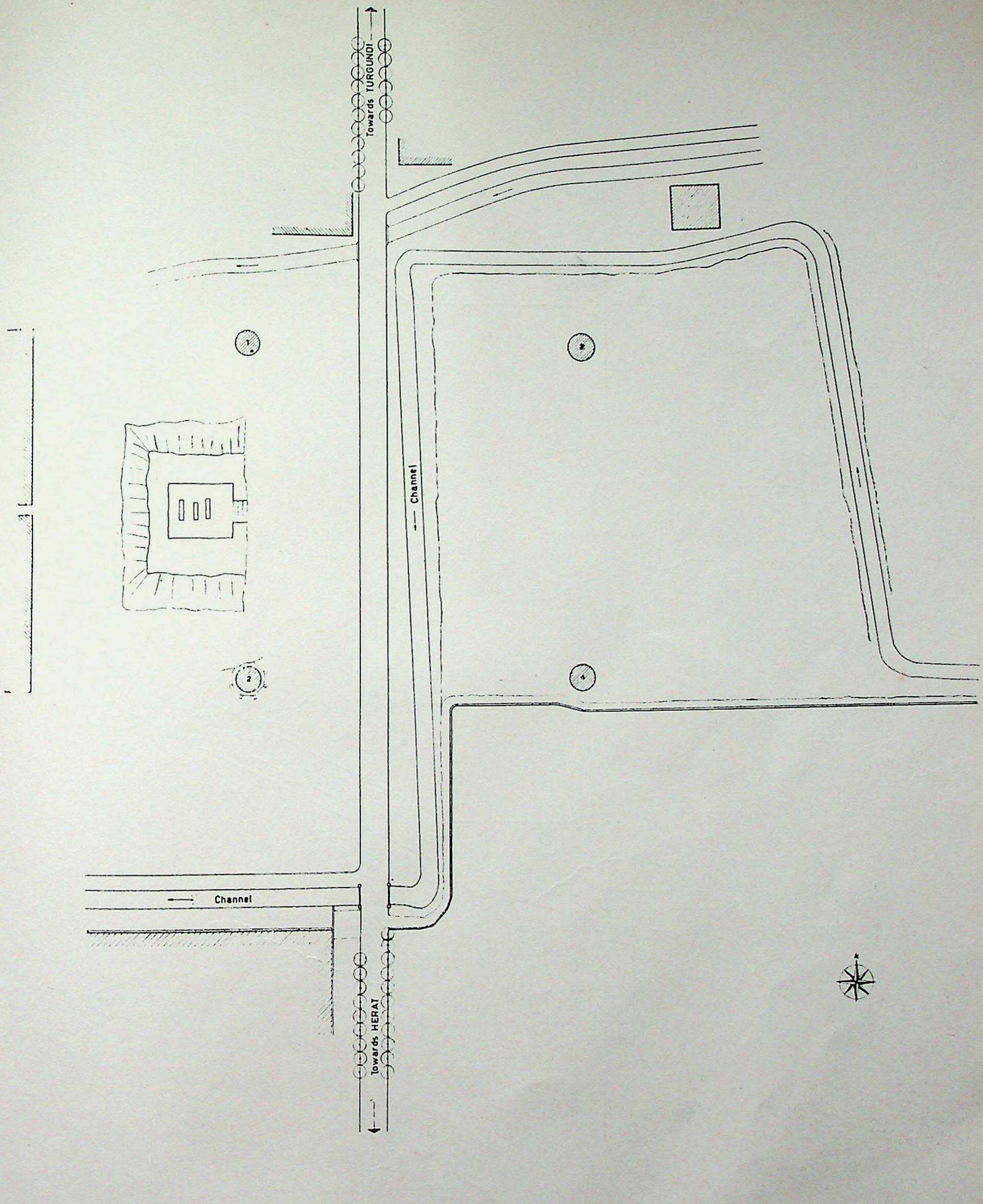

Towards TURGUNDI
1
3
Channel
2
4
Channel
Towards HERAT
N
0
5
10
20
30
40

Fig. 87.

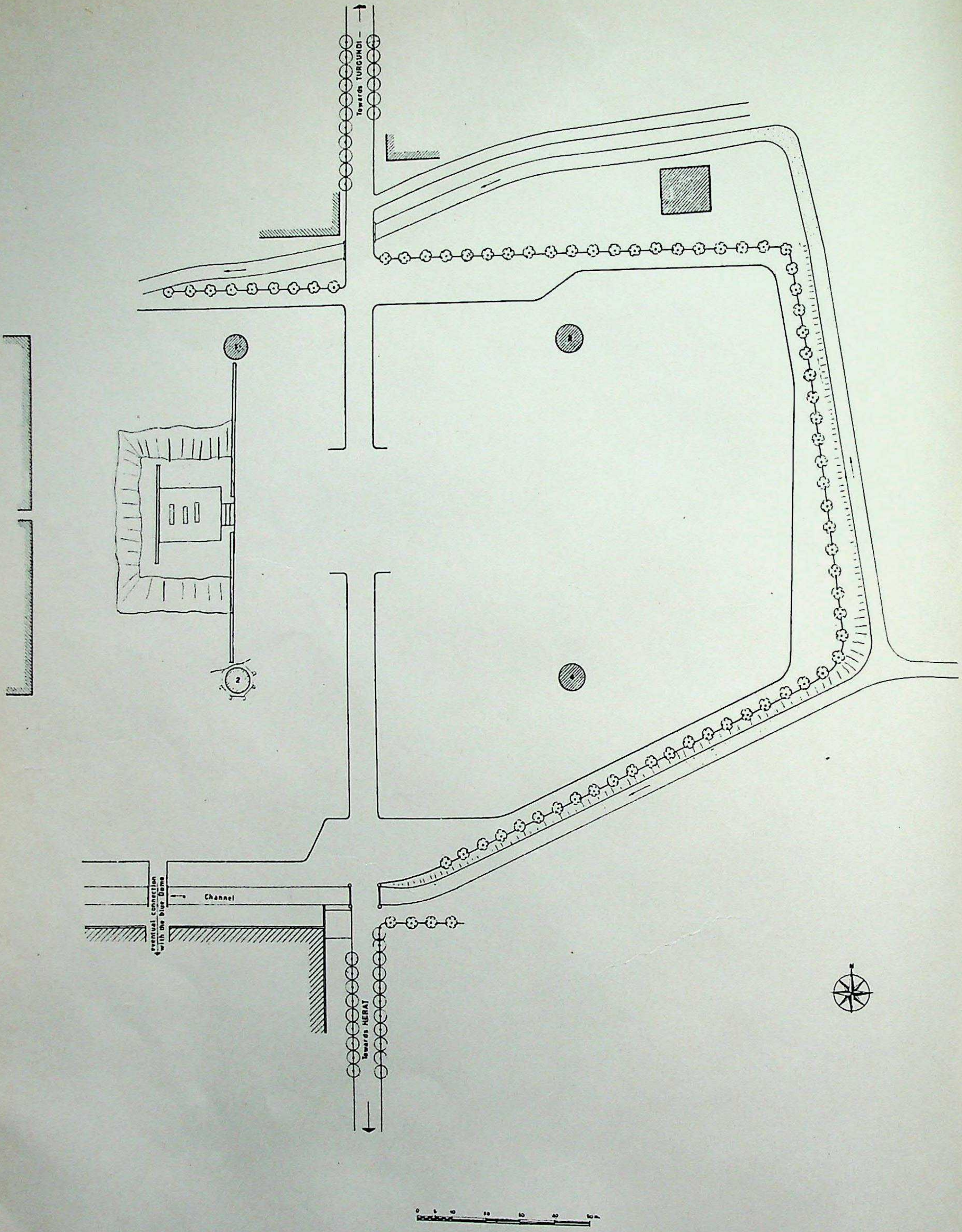

Towards TURGUNDI
1
2
3
4
Channel
eventual connection with the blue Dome
Towards HERAT
N
0 5 10 20 30 40 50 m

Fig. 88.

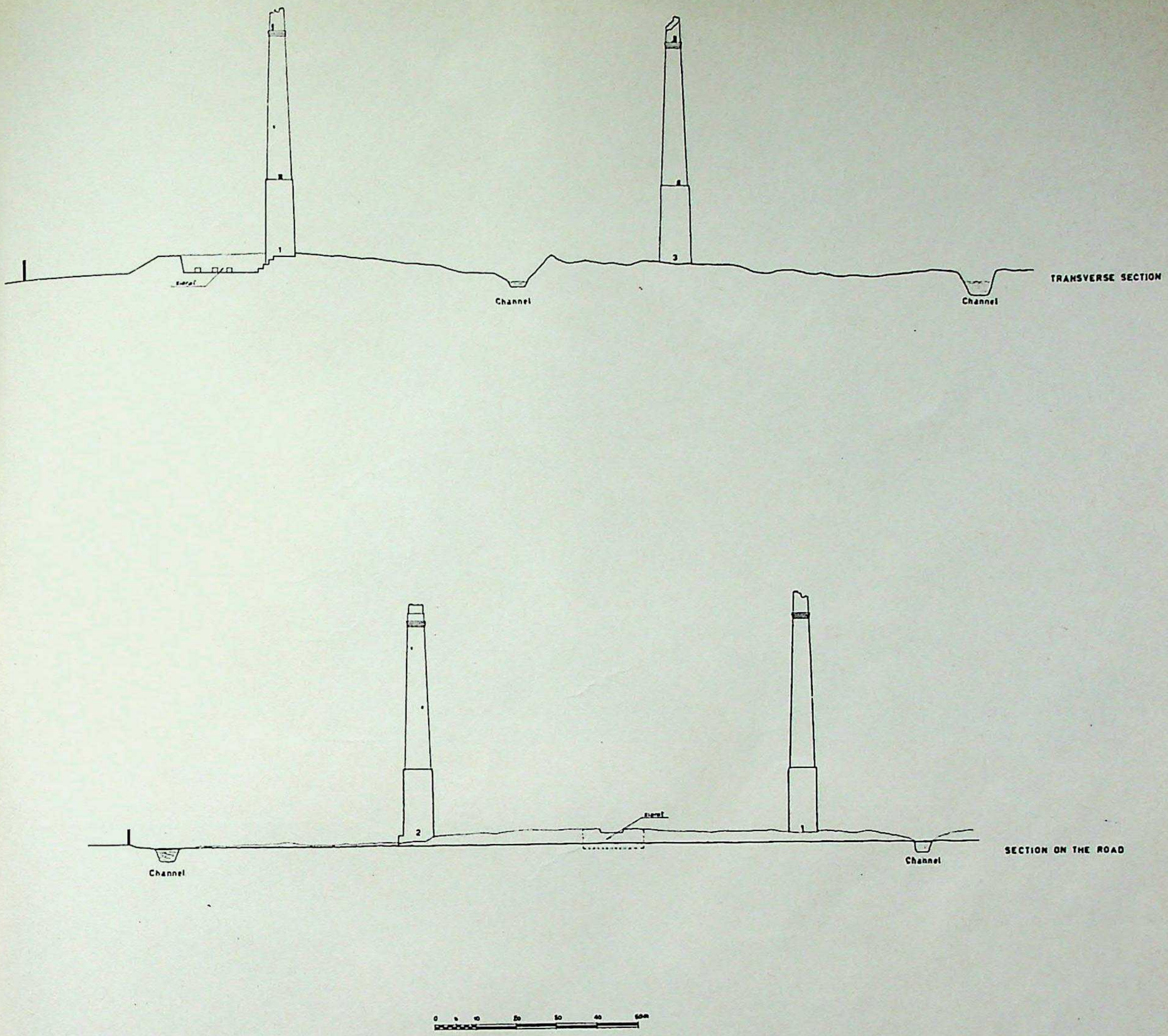

1
3
Channel
Channel
TRANSVERSE SECTION
2
1
Channel
Channel
SECTION ON THE ROAD
0
5
10
20
30
40
50m

Fig. 89.

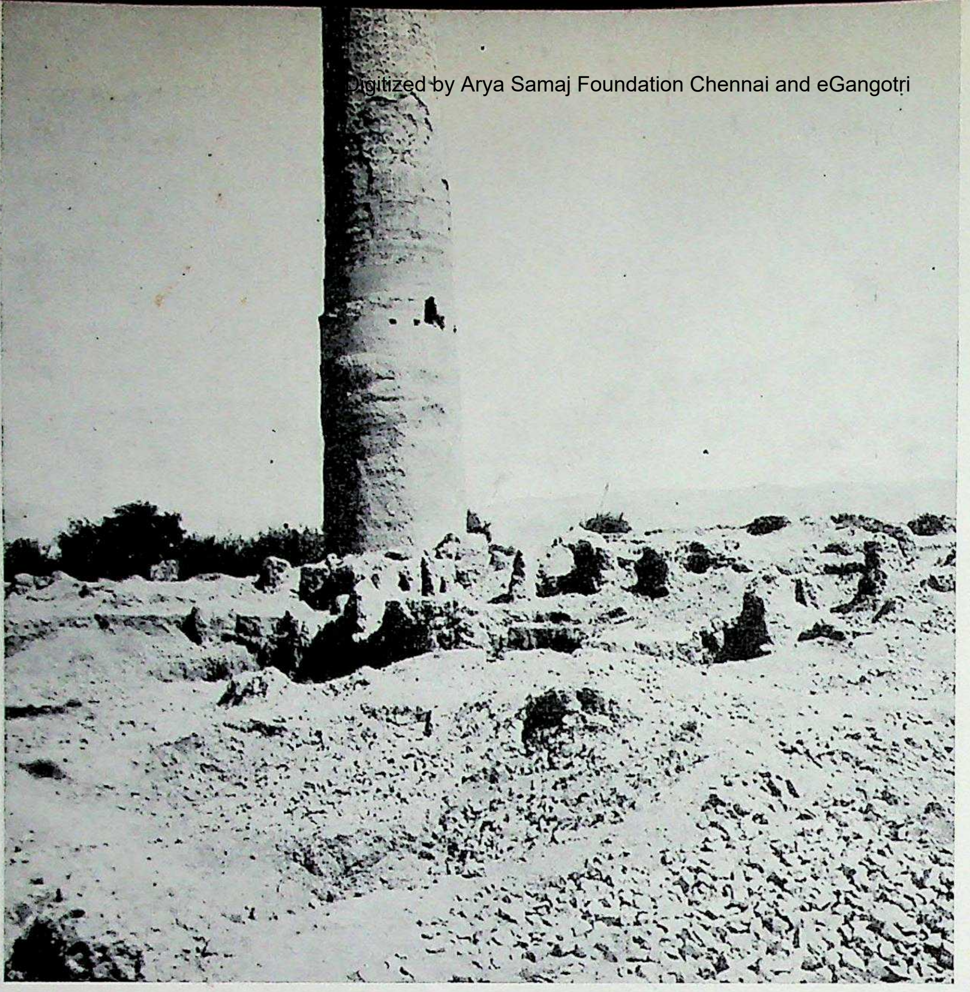
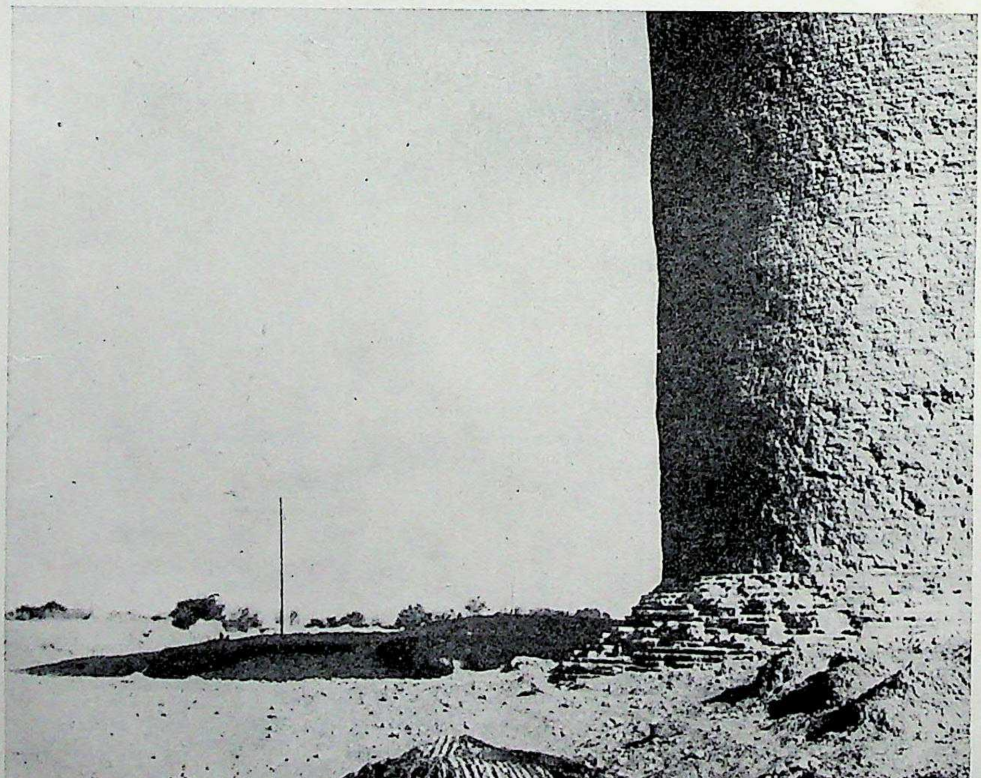


Fig. 90.

Fig. 91.



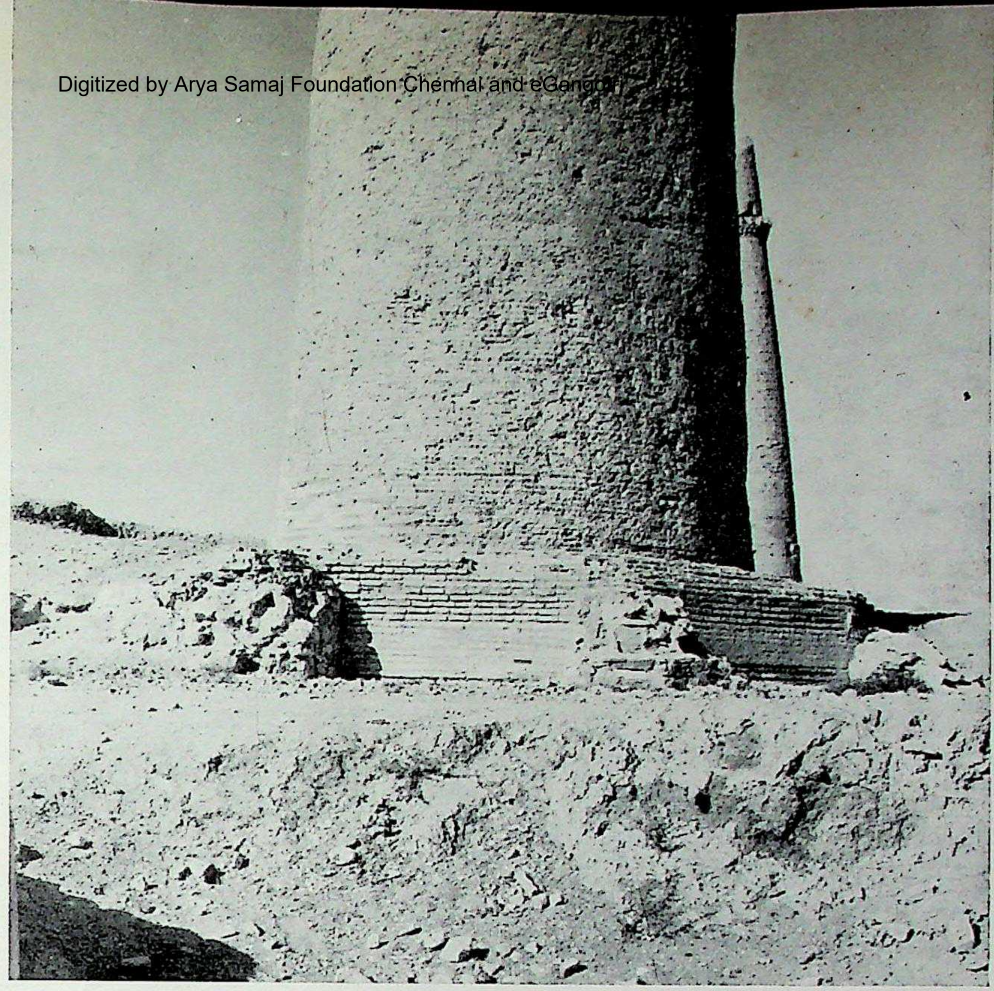


Fig. 92.

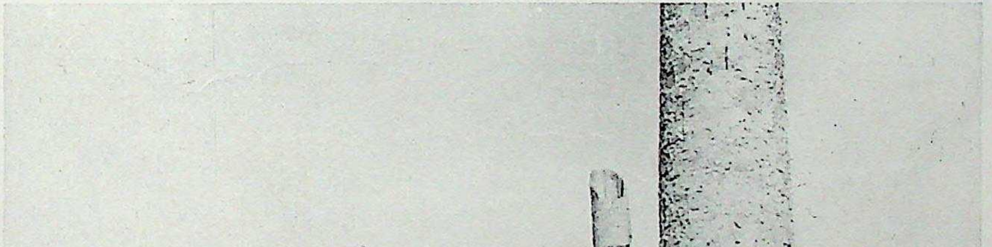


Fig. 93.

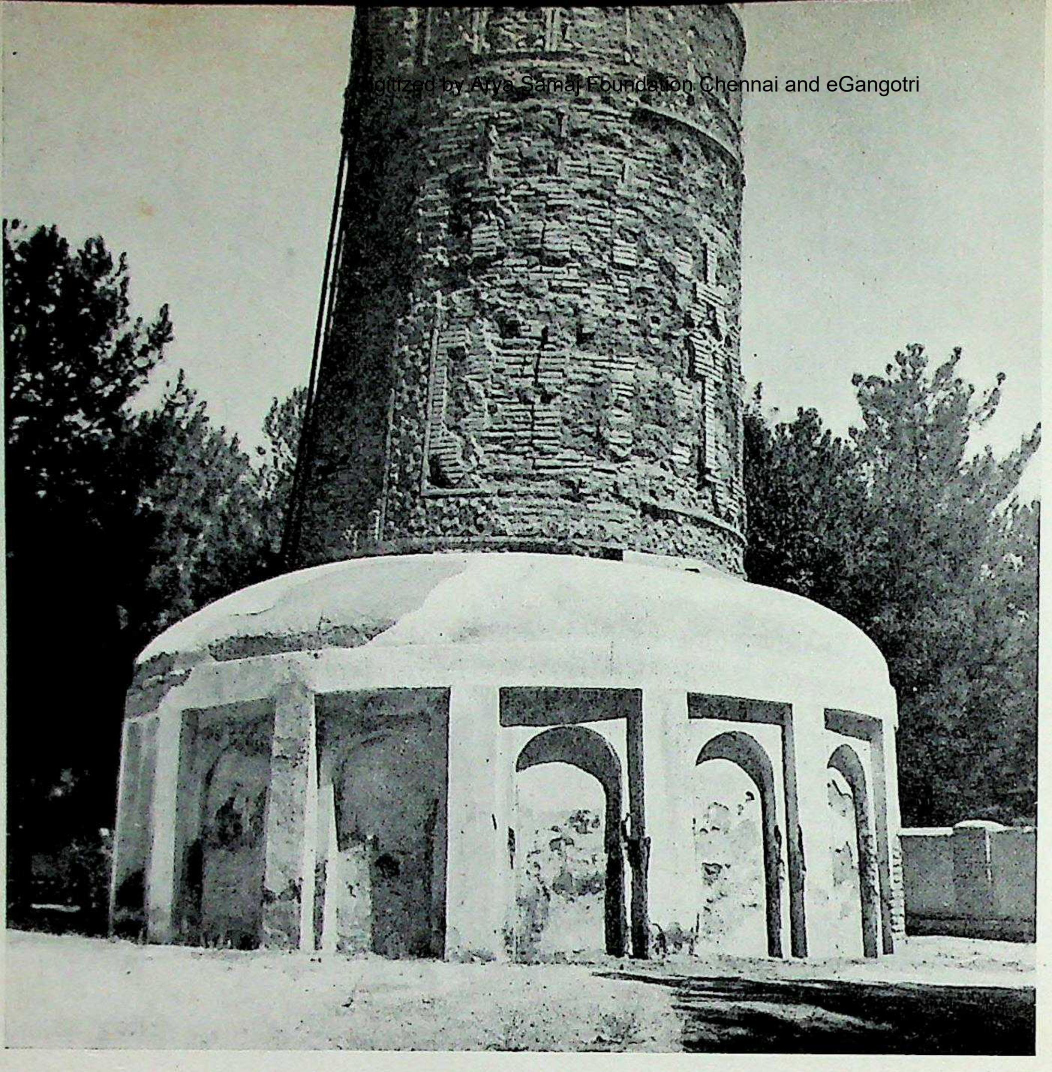
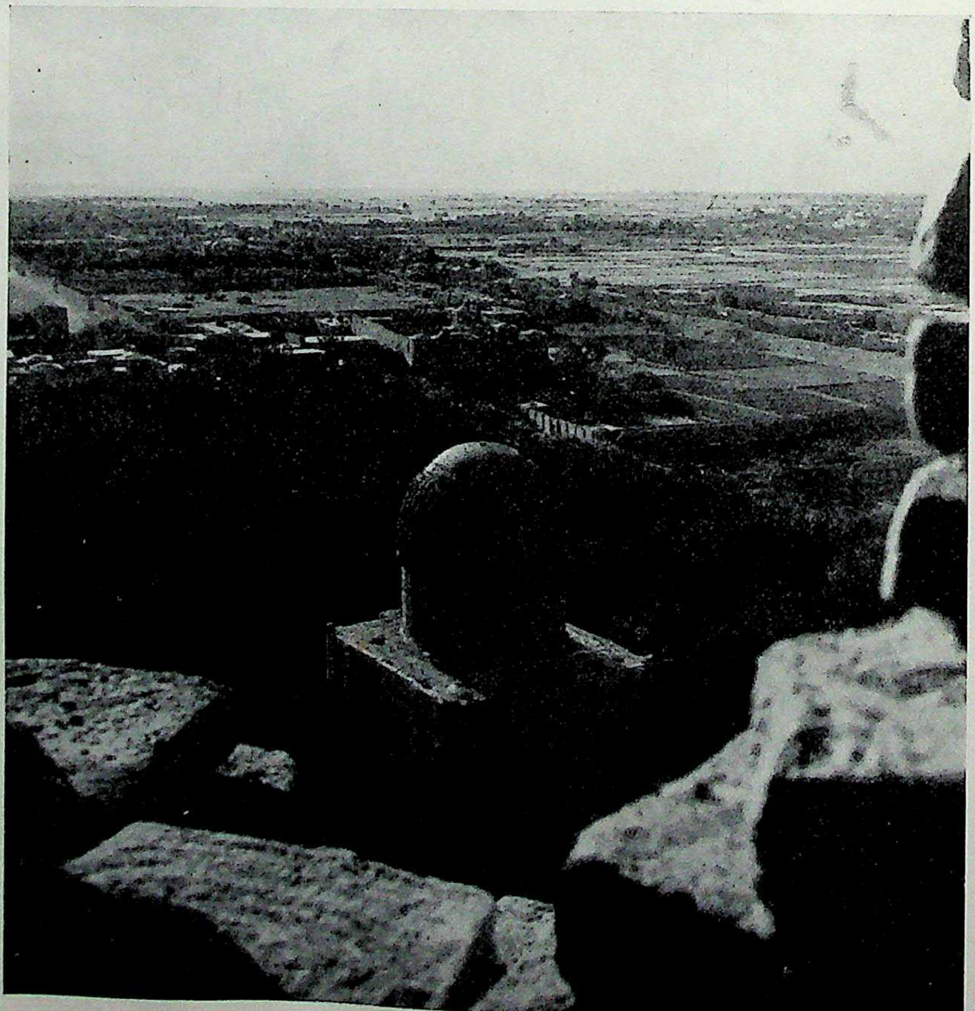


Fig. 94.

Fig. 95.



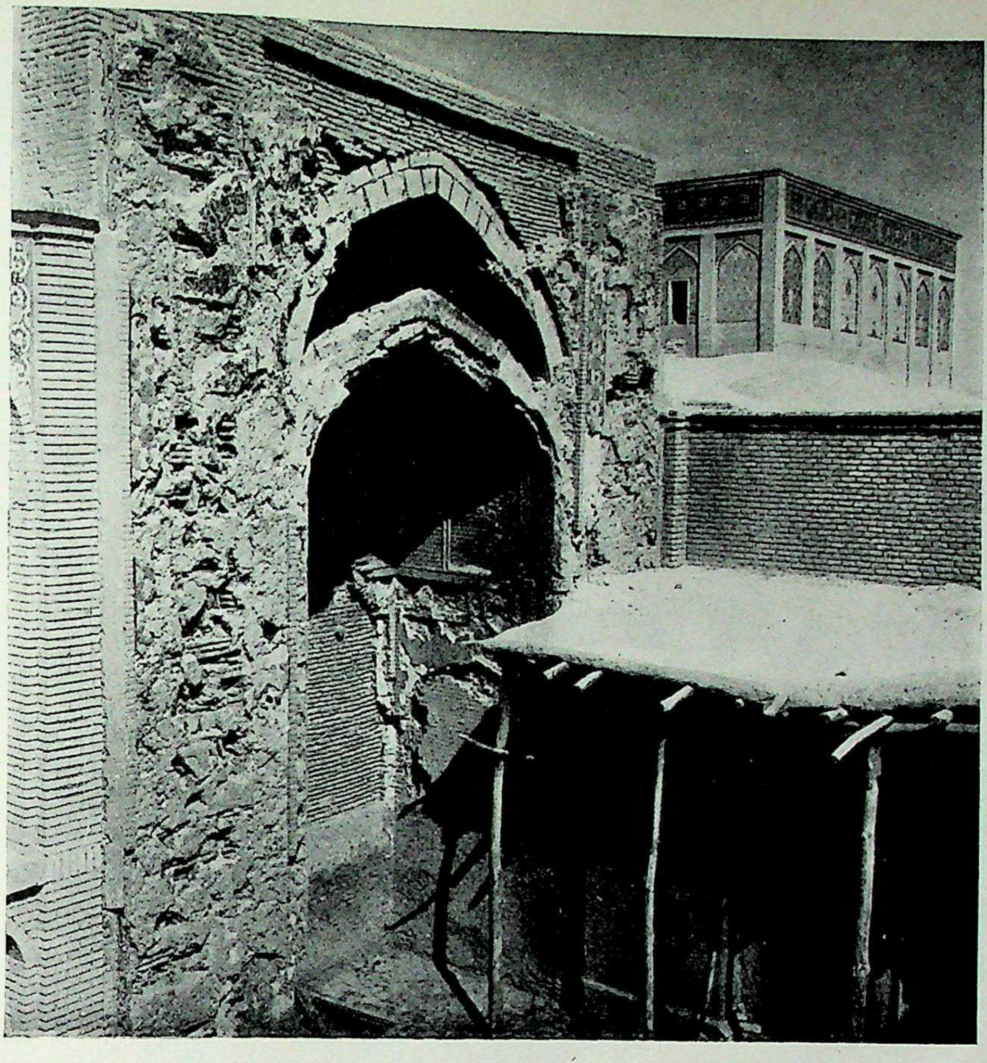


Fig. 96.

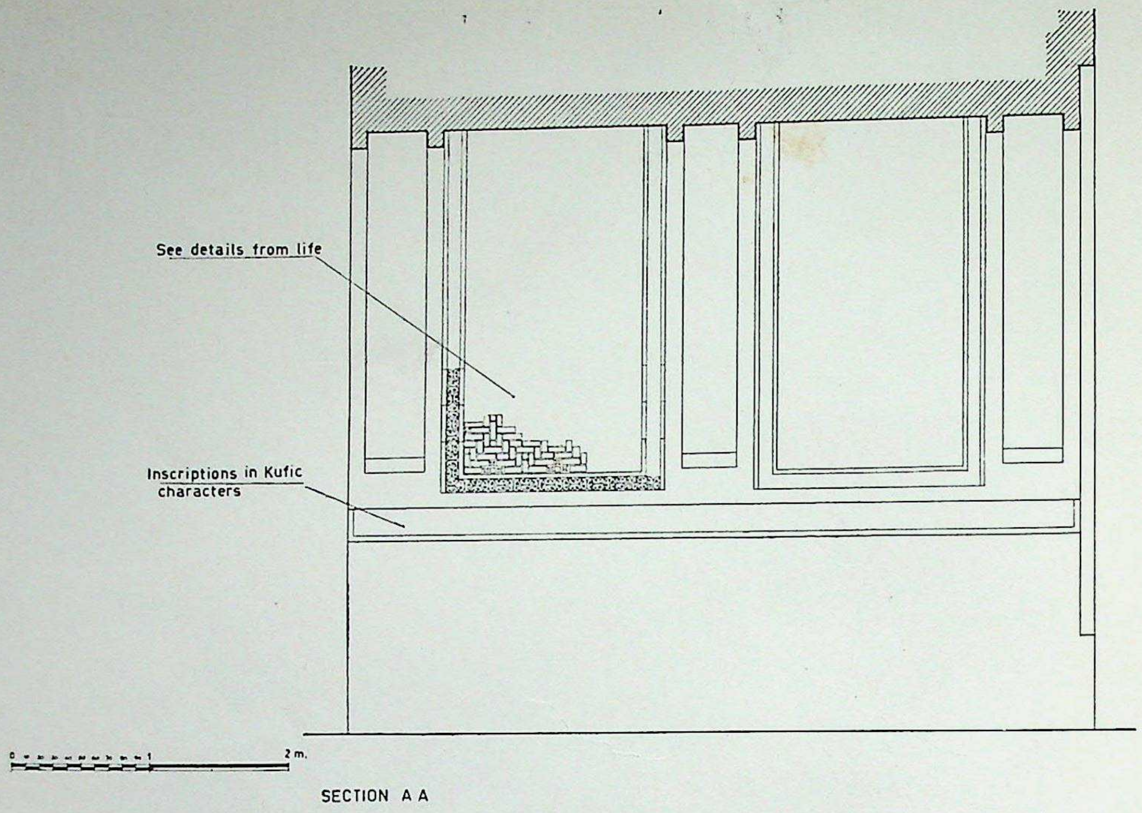

See details from life
Inscriptions in Kufic characters
0
1
2 m.
SECTION A A

Fig. 97.

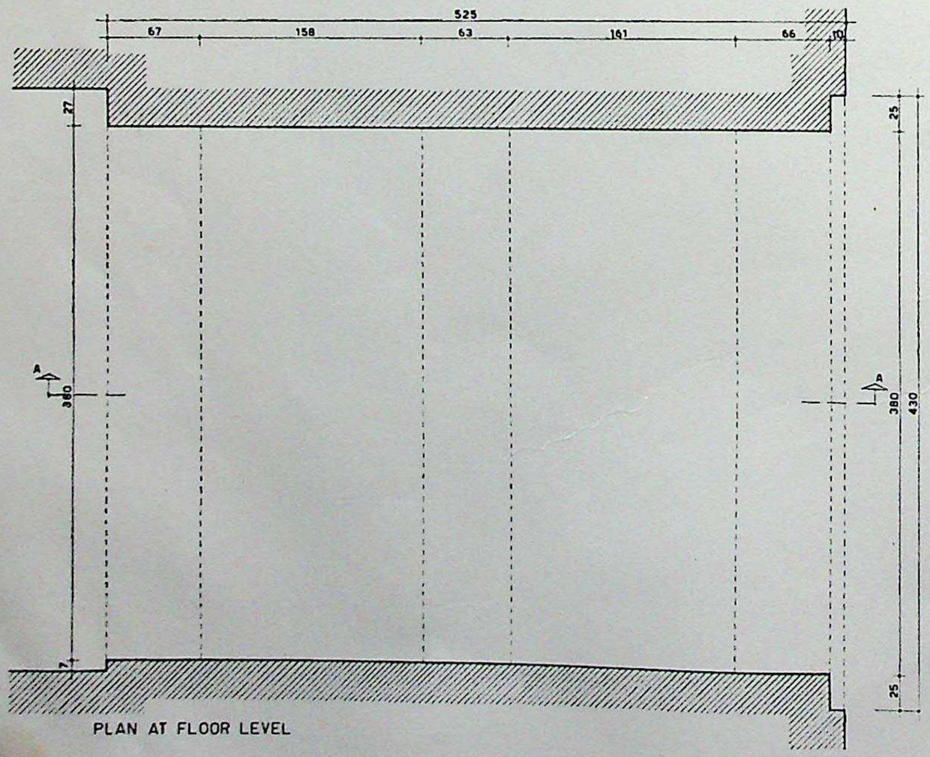

A
A
PLAN AT FLOOR LEVEL

Fig. 98.

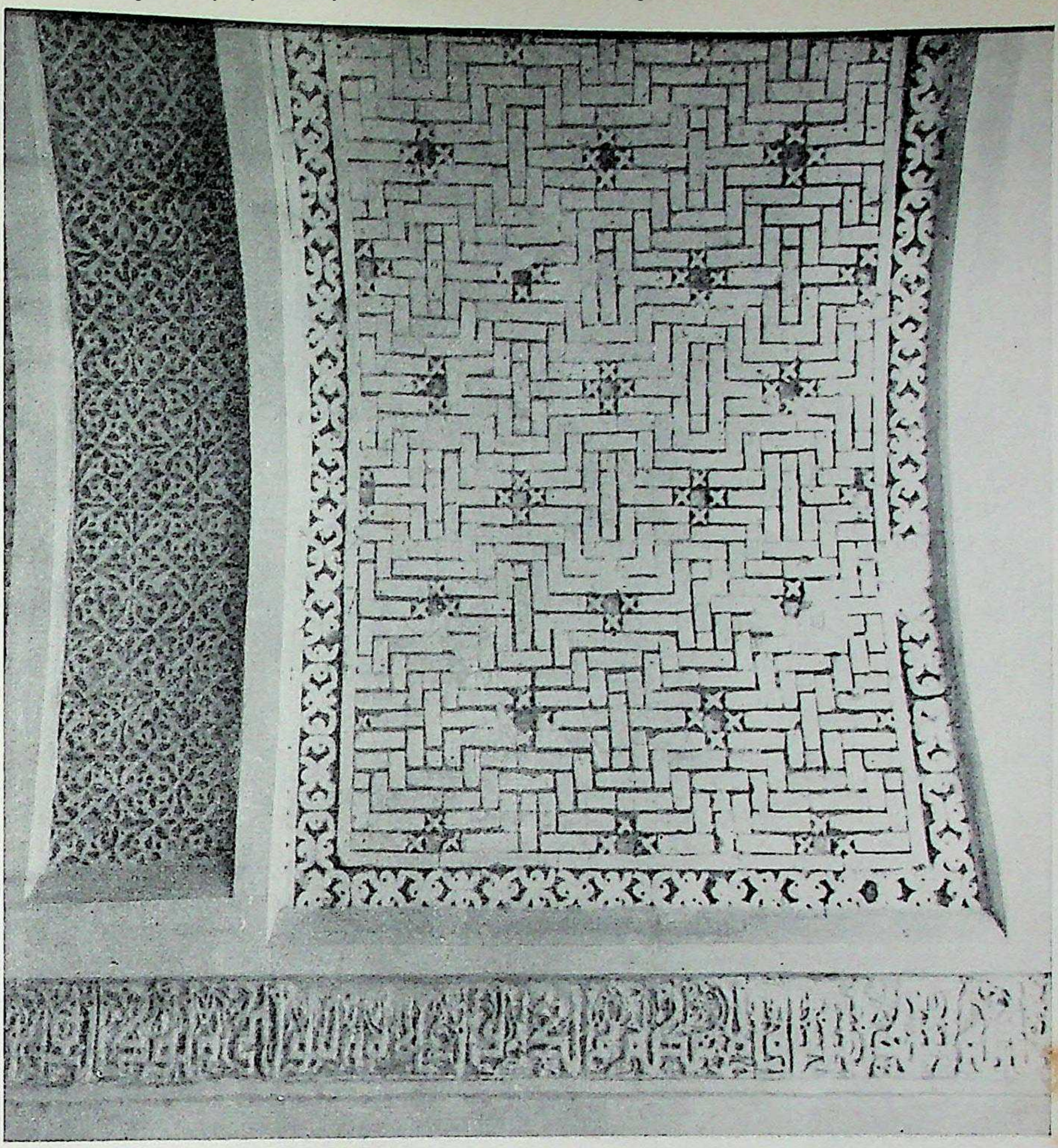


Fig. 99.

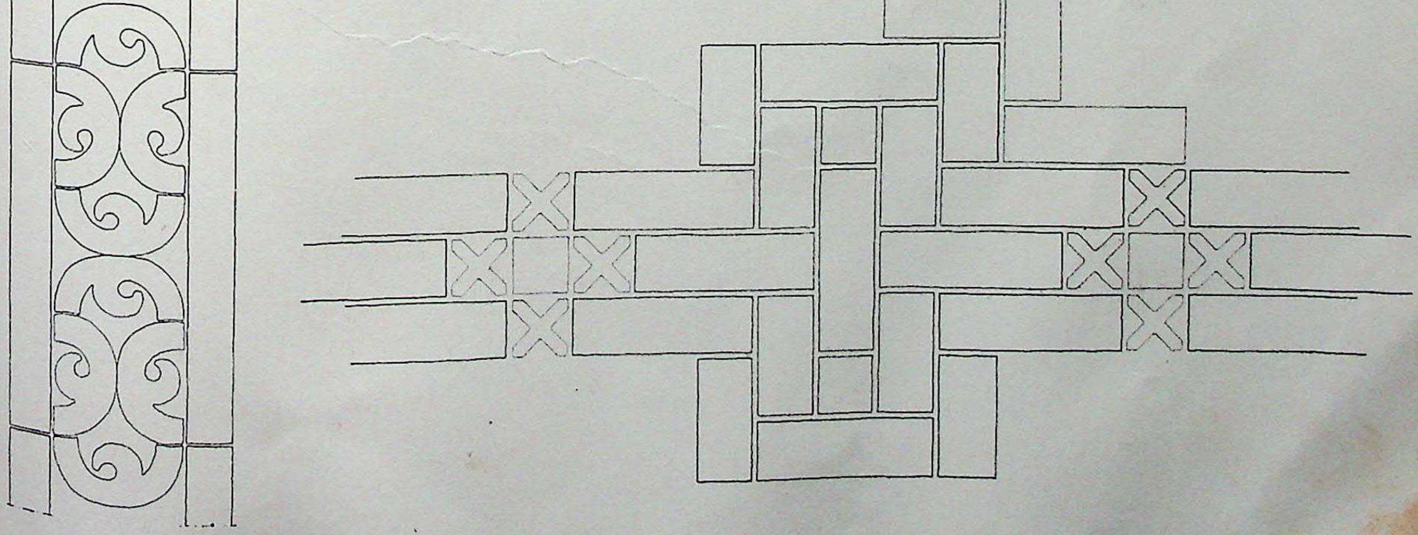


Fig. 100.

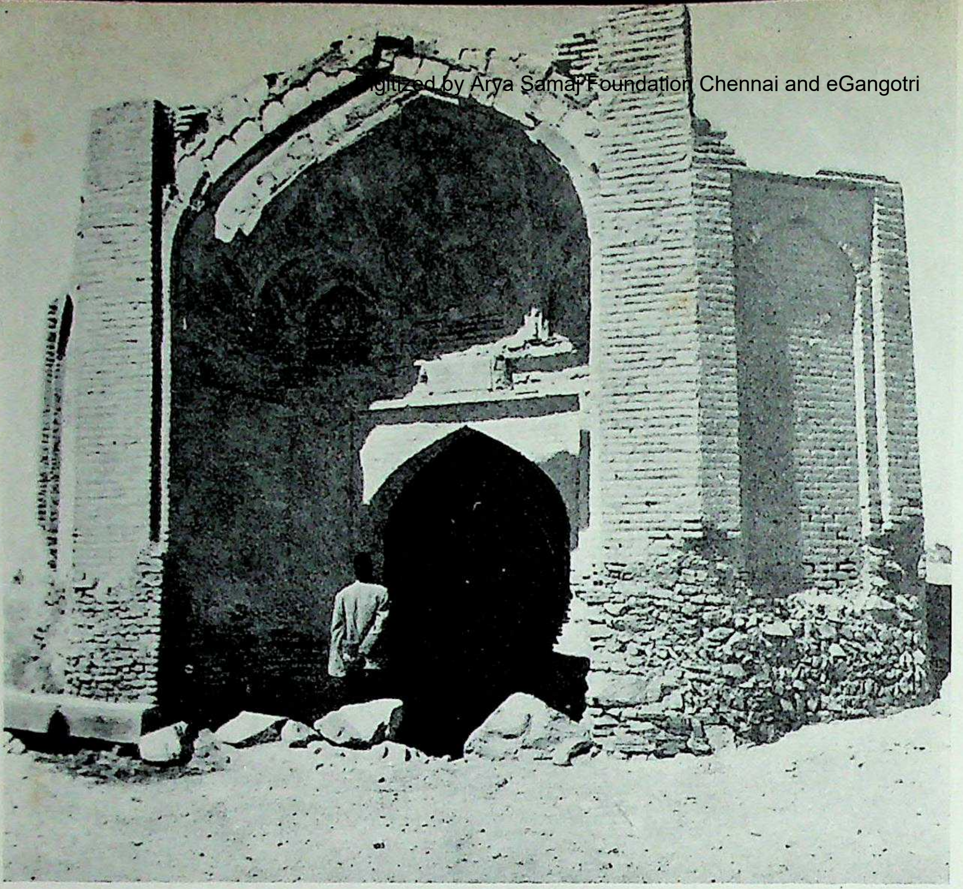


Fig. 101.

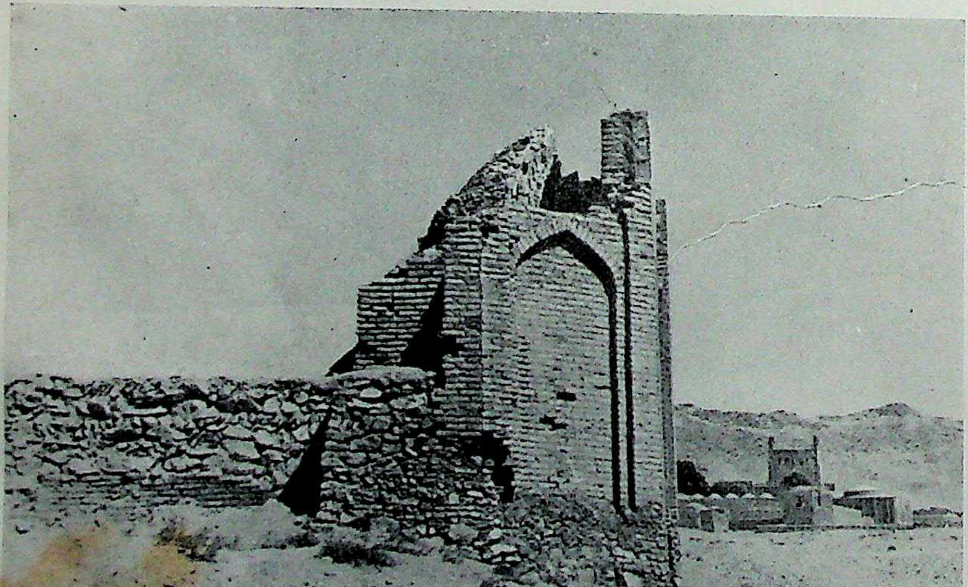


Fig. 102.

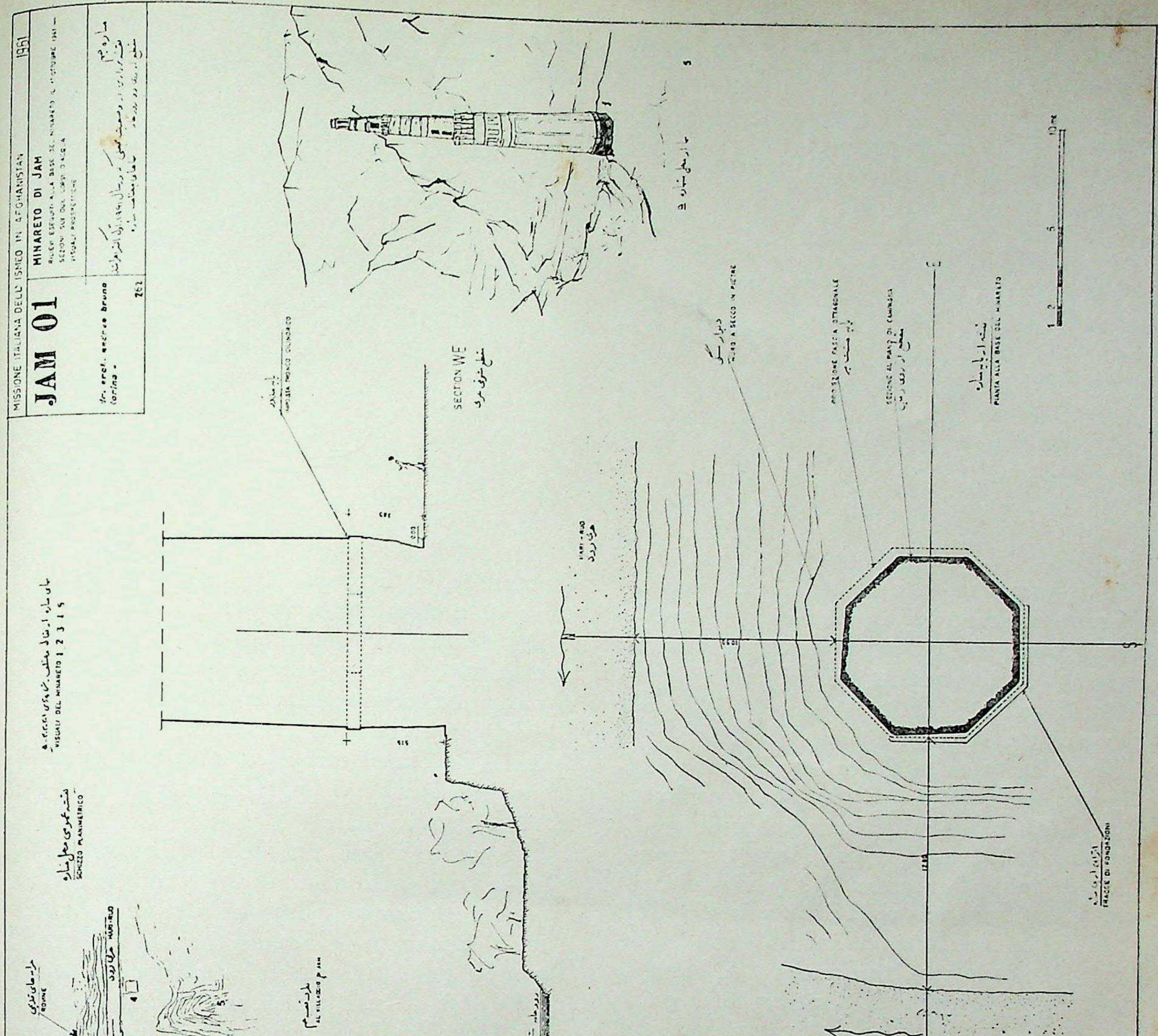

MISSIONE ITALIANA DELL' ISMEO IN AFGHANISTAN
1961
JAM 01
MINARETO DI JAM
dr. arch. andrea bruno
torino
262
SCHIZZO PLANIMETRICO
VISUALI DEL MINARETO 1 2 3 4 5
RUINE
MINARETO JAM
HARI RUD
AL VILLAGGIO
SECTION WE
SECTION SN
MURO A SECCO IN PIETRE
PROIEZIONE FASCIA OTTAGONALE
SEZIONE AL PIANO DI CAMMINO
PIANTA ALLA BASE DEL MINARETO
TRACCE DI FONDAZIONI
TRONCO CILINDRICO
FASCIA OTTAGONALE
PARAMENTO MANCANTE
N
S
E
W
1
2
3
4
5
10 m

Fig. 103.

A Probable Achaemenid Zone in Persian Sistan

Two years ago the Italian Archaeological Mission in Iran, led by Professor Giuseppe Tucci, began a series of researches in Persian Sistan (1). This region, whose territory substantially corresponds to the Zaranka or Drangiana of the Achaemenid era, the Sakastana of Parthian times, and then the Sijistan of the Islamic Medieval period, had been explored for specific archaeological research in its western area by A. Stein (2) and later in a more limited way by E. Herzfeld (3), while the eastern Afghan part was visited later, in 1936, by the Hackin-Ghirshman Mission (4) and, some ten years ago, by the American W. A. Fairservis Jr. (5). Despite the discovery of a great number of ancient sites that range from the pre- and proto-historical period to the end of the Moslem era, the Sistan still poses its historical and archeological problems almost intact. We will not examine here the entire question of the region lying along the great communication artery between Persia and India, which is to be the subject of another article; we merely mention the fact that archaeologically the Achaemenid period in the Sistan is practically unknown, with the possible (and somewhat doubtful) exception of Nad 'Ali (6).

I wish here to draw attention only to a place which I believe to be of great interest and which I have not found mentioned by previous explorers; I discovered it while trying to retrace the Northern route of the Sana Rud, probably the oldest stretch of the Hilmand (7). I visited this place twice, the first time in November, 1960 (8) and the second in the same month of the following year together with the Mission Chief Professor G. Gullini (9). Unfortunately, both times, for various reasons, these visits were extremely brief.

Anticipating my conclusions here, I may say at the outset that this is very probably a building complex of the Achaemenid era, a fact which, however little mentioned, takes on special significance and even a certain timeliness in the atmosphere of the commemorations of Cyrus.

The archeological site locally known as Shar-i Kuna is located on the plain to the south of the large village of Qal'ah-i Nau (fig. 1) known to be not far from a famous Ateshgah (10). The archeological zone is set on the edge of lands which until recent times were farmed and are now covered by sands, lying lower on the desert plain. It occupies a slightly tilted area bordering on the dasht that dominates it with steep walls on three sides and is open to the north.

At first sight the terrain is unpromising, like that of a large part of the Sistan, brownish grey, slightly rolling, and partially invaded by the moving sand dunes. Only on closer observation one notes the bits of pottery of a common type strewn about. But a closer inspection enables one to discover the presence of ancient walls which, however, do not rise above the surround greyish terrain but show their outlines traced in it in a slightly lighter, whitish color due to a slight salty deposit (fig. 4). The certainty that these were walls came from the regularity of the traces, and was afterwards confirmed by some partly uncovered structures laid bare by the wind and the loose waters; these structures either followed symmetrical lines or merged with the white traces already observed. Climbing the sheer drop of the desert to the west, I was able to view from a height, as though in an x-ray picture, a really impressive complex of buildings whose designs were drawn in white on the uniform greyish surface of the terrain (fig. 2) ([11]).

As seen from above (fig. 2) the structures are distributed into three main groups ([12]). A series of buildings of square design forms a line almost to the foot of the eastern scarp of the dasht, running approximately north-south. Another series, also square, runs roughly east-west, almost at a right angle to the first, distributed along the northern edge of the steep slope. Other numerous remains can be seen on the west side of the slope immediately below the drop of the desert (fig. 8). One can also perceive remains of other structures along the old canal on the plain of Qal'ah-i Nau to the north-west.

The design of one of these structures is particularly clear and characteristic (no. 3, figs. 3 and 11). The building is square in outline, surrounded on all four sides by four gateways supported by two rows of pillars (figs. 6 and 6); at the corners four square rooms (figs. 3 and 7) are clearly outlined, subdivided into smaller rooms in at least one of which it is possible to recognize the typical arrangement for a stairway. At the center of the building is a large square space, and it is not clear whether it was once covered or was an open courtyard.

Typologically, I believe without a doubt, this design (fig. 11) is comparable to the planimetry of the great Achaemenid architectural works. In fact, one spontaneously marks the close connection between the design of the buildings just described and the apadana of Darius at Persepolis (fig. 12), the tachara of Darius, the tripylon, the hadish of Serse ([13]) or at Pasargade itself the audience-palace of Cyrus ([14]).

The resemblances seem to me far greater than the differences. Indeed, rather than actual differences I feel one may speak of variations, evidences of the vitality of the Achaemenid architectural systems of great palaces which, as is well known, were the fruit of quite a complex formative process ([15]).

The uncertainty as to the exact arrangement of the central part of the building can only be the cause of relative doubts. In fact, the lack of traces of structures at the center may argue against the existence of a hypostyle room on the typical model we know in Persian dominated territory. This hypostyle room which rose in height above the rooms and porticos surrounding it involved very high ceiling supports. For obvious static reasons, they could not conceivably be realized in crude brick, nor could they certainly have been made of stone which is absolutely rare in the Sistan. On the contrary, the hypothesis may be advanced that the roof was supported by wooden columns, a material also rare in the region and probably so in ancient times as well, but much easier to transport than stone and besides absolutely orthodox in Achaemenid architecture. The use of wood may thus explain satisfactorily the apparent absence of traces of structures on the surface at the center of the building.

The hypothesis that the central area represents a courtyard may also be considered, and in this case too there is no lack of examples in the architecture of Persepolis, such as the so-called treasure-courts ([16]), in which De Francovich quite soundly sees courtyards intended for audience reception halls ([17]). In the building we may then perceive some Mesopotamian characteristics, but also perhaps repercussions of a local indigenous tradition, as yet unknown, even though in the general design the Achaemenid architectural system predominates.

Of course, only excavations, which have been planned for the coming campaign, can clarify these problems.

It may be worthwhile to give some attention here to the topographical position of the Shar-i Kuna which is set at the foot of a high scarp dropping from the dasht that surrounds it on all sides but one. Several reasons may have determined this choice, but it is not perhaps due to chance that it should remind us of the similar setting of Pasargade and of Persepolis.

The materials gathered on the surface are of considerable interest too. The pottery-ware, which makes up almost the whole of our collection, shows a considerable variety of types and forms which are amply comparable to the material gathered by Fairservis Jr. on the Sorkh Dagh at Nad 'Ali ([18]), and partially to that coming from earlier soundings in the same site made by Ghirshman in 1936. As we know, the latter scholar advanced the rather well-founded hypothesis that the first period of the two he brought to light might refer to the Achaemenid era, while for the second, in which the pottery shows unquestionable similarities to the first, he was inclined to set a date not later than the 8th century B.C. (19).

The pottery-ware

I. — *Plain pottery*. A) Not very refined clay-paste, often sandy, rose-red coloured. Since these are fragments that have been exposed to wind erosion, it is not always possible to determine whether there was a slip or not. Among the typical shapes the most prevalent are bowls of large and medium sizes with a characteristic careened outline defined by Fairservis Jr. as «Nad-i 'Ali ridged ware» (20). As at Nad 'Ali, the careen may be simple (fig. 13, Nos. 1-2, 11, 13-15) or multiple (fig. 13, Nos. 10, 12). The borders are of two basic types: flat (fig. 13, Nos. 3, 8-12) or rounded outward (fig. 13, Nos. 1-2, 4). Among the flat types the « Knife-like edge » variation is absent (21). Fairservis notes similar shapes in the area of Farah (22). Bowls with a simple careen, rather small in size, are abundant on some small tumuli on the Rud-i Biyaban (23). Types with a simple careen, although in a slightly different shape, come from Anau III and IV (24).

Also widely in evidence are the large-mouthed jars with no neck, with borders of various kinds both flat and rounded and reversed on the outside, as well as simple raised or barely flaring ones (25) (fig. 14, Nos. 16, 22).

Plain pottery. B) Of finer paste than the preceding kind, yellow coloured. We only have a few fragments of jars, bowls, and a small three-handled vase. Yellow-reddish slip (fig. 15, Nos. 1-5).

Plain pottery. C) Good red paste, red slip (fig. 15, Nos. 6, 10). A few fragments are known, which are evidence of goblets, drinking cups, rather large in size and decorated with ribbed patterns.

II. — *Rough finish*. A) The red, rather crude paste shows the presence of an abundance of black or brown gravel which emerges on the surface of vases (26). We have some fragments of large careened bowls similar to some of those described earlier (fig. 16, 1-2) and a fragment of a large jar with a narrow base (fig. 16, 4) like that found by Ghirshman at Nad 'Ali II (27). As is well known, this shape is widespread both in time and place; for example, we see it at Tepe Giyan (28), Tepe Sialk (29), Mundigak (30), and at Anau III and IV (31), and in modified form at Jaz Tepe (32).

Rough finish. B) The paste is similar to the preceding kind, but the surface is not rough and has a sandy appearance. We have the remains of a cylindrical vase (fig. 16, 3).

III. — *Dark yellow-green*. Perhaps this is nothing but an overfired piece of the preceding series of plain ware. The paste is slightly sandy, brown with black streaks coming to below the edge on the inside and a dark yellow-green colour, slightly vitrified, on the outside. We have a fragment of a bowl (fig. 15, 14).

IV. — *Violet-brown*. A dark red rather well-purified paste, slipped in violet-brown. Only some fragments of middle sized bowls are known (fig. 15, Nos. 11, 15). To be found in various other non-pre-historical areas of the Sistan.

V. — *Brown-black*. A clean clay-paste. The outside half is brown and the inside is black. It is rather rare, and the forms are unknown.

VI. — *Black-brown*. A hard, compact and resonant clay paste with small white impurities. The sides are very thin. The outside is black, almost shiny, and the inside is brown. Decorated with wide riffed patterns. The forms are lacking.

VII. — *Grey-black*. A grey, rather well-purified hard and resonant clay-paste, black on the outside and grey inside, decorated with wide and rounded riff patterns. The forms are lacking.

VIII. — *Light burnished ware* A red, rather well-purified paste; the outside is decorated with rather faint riff patterns and the surface is irregularly burnished. Perhaps parts of large jars.

IX. — *Red-brown burnished ware*. We know only two fragments which are parts of two different goblets (fig. 15, No. 15). The clay mixture is red, rather pure, and quite thin. The vases are faced with a red-brown paint often decorated with dense ray-pattern burnishing both inside and outside (33).

X. — *Painted ware* (34). A) *Diluted brown*. We possess a fragment of a vase in light clay, painted on one side, perhaps connected with the painted vases of Nad 'Ali II.

B) *Brown-black*. A single fragment in pinkish clay.

In addition, many fragments decorated with wide riffed patterns were collected, some flat in outline and some rounded, probably corresponding to plain ware. This decoration is one of the most common and widespread throughout the entire area of the Sistan, and is found in Arachosia and in Baluchistan, and seems to refer exclusively to the period of known history. The type persists down to the Islamic period in the 10th and 11th cent. A.D.

Metals

A three-flanged arrowhead bronze of the so called Scythian type has been found, similar to those found by Ghirshman at Nad 'Ali I and II (35).

On the basis of the ceramic ware, there remains no doubt that the Shar-i Kuna of Qal'ah-i Nau and Nad 'Ali are archeologically correspondent and contemporary sites, and present the same cultural connections. The Achaemenid dating attributed with reservations by Ghirshman to the First Period at Nad 'Ali is confirmed at Qal'ah-i Nau if my recognition of the best thing we can hope for, that is, a piece of architecture, turns out to be correct.

If the verification of excavation does not refute my hypothesis, it will be superfluous to point out the importance of such a find. We will find ourselves in the presence of an Achaemenid settlement of truly outstanding importance which will enable us to fill in at least in part this practically unknown aspect of Sistan archeology (36). It was strange, to say the least, that we should have known of no substantial trace in Drangiana of this important historical period.

Although historical sources have been ungenerous in enlightening us as to the happenings of this region (37), once fertile and flourishing, we do know that, as Darius and Herodotus remind us, it was part of the territories of the Great King, that its inhabitants « clothed in colored garments and with footwear reaching the knee... and Median bows and lances » (38), led by Ferendakes, laid siege to Serse in the expedition against the Greeks in 480.

The region situated along an important trade and military route between Persia and India then became especially important in late Achaemenid times, when the power of the Great King in the territories east of the Hilmand weakened, as a frontier province in control of the route towards the lands of the Indus. The importance of the control over this region did not escape Alexander the Great who founded an Alexandra there; Krateros crossed it on his return from India. Nor should we forget the special significance of Drangiana in the ancient Iranian traditions, and we may recall that various Pehlevi texts place outstanding sites of the Zoroastrian tradition in the Sistan (39). And according to Stein's interpretation of the Avesta passage, Yašt, XIX, 66, the « kingly glory » is inseparable from the possession of Lake Hilmand (40): « We worship the mighty unattainable (kingly) glory (axᵛarətəm xᵛarənō) which attaches itself to him who rules there where is the lake Kaçaoya formed by the Haêtumatem (the Hilmand lake and river) where Mount Ushidhâo is (the island of the Kōh i Khwāja)... » (41).

Umberto Scerrato

NOTES

(1) In 1960 the Mission consisting of Professor Giorgio Gullini, the Assistant Mr. Manlio Valentini, the draftsman Mr. Enrico Frascarolo and the writer stayed in the Sistan from October 23 to November 30. In 1961, with the addition of a second Assistant, Mr. Gabriele Graziani, the team worked there from October 10 until the beginning of December.

(2) A. Stein, *Innermost Asia. Detailed report of Explorations in Central Asia, Kan-Su and Eastern Iran*, Oxford, 1928, II, pp. 906-981. For the period earlier than Stein's work, see the broad overall study of the Sistan by G. P. Tate, *Seistan, A Memoir on the History, Ruins and People of the Country*, Calcutta, 1912.

(3) E. Herzfeld, *Reisebericht*, *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 80, 1926, pp. 267-272; Id. *Sakastana*, *Archaeologische Mitteilungen aus Iran*, 4, 1931-1932, pp. 1 e ss; Id. *Archaeological History of Iran*, *Schveich Lectures of the British Academy*, 1934, London, 1935, pp. 58-75.

(4) J. Hackin, J. Carl, J. Meumiè, R. Ghirshman, *Diverses récherches archéologiques en Afghanistan* (1933-1940), Mem. de la Délégation Archéologique Française en Afghanistan, VIII, Paris, 1959, pp. 23-48.

(5) W. A. Fairservis, Jr., *Archaeological Studies in the Seistan Basin of South Western Afghanistan and Eastern Iran*, *Anthropological Papers of the American Museum of Natural History*, New York, 48, 1 (1961), pp. 1-128.

(6) R. Ghirshman, « Récherches Préhistoriques en Afghanistan. Fouilles de Nad-i Ali dans le Seistan Afghan » (Rapport préliminaire), *Revue des Arts Asiatiques, Annales du Musée Guimet*, XIII, 1939, pp. 10-22 (reproduced in the o. c. in note 4, pp. 39-48).

(7) The Sana Rud and also Rud-i Sina, perhaps the most ancient bed of the Hilmand river. So far as I know, its course has not been explored after its recognition by Tate who does not record any trace of human occupation in connection with it, op. cit., p. 128: « Midway between Bandar and Khwabgad there is a third channel and the most ancient of all channels which the Helmand has occupied at one time or another of its existence. It is called the Sana Rud, also the Rud-i Sina. This ancient bed of the river enters the southeastern portion of the northern of the two modern deltas. Its embouchure is situated at the eastern end of a deep bay where its ancient delta has been obliterated by more recent deposits of silt », and op. cit. p. 133:

« The Sana Rud differs greatly from the Rud-i Biyaban (the southernmost channel of the Hilmand, also dry now). If appearances are to be trusted, it does not seem to have been an actual flowing river subsequent to geologically recent times, speaking, that is to say, under correction, and always as an untrained observer. Along its whole course, from its western embouchure to the point where its valley diverges from the present Hilmand valley, there is not one single remain or sign that points to human occupation ». Op. cit. p. 137: « The Sana Rud does not appear ever to have possessed any practical value as a river. There are along its course many places where by means of irrigation crops could have been raised. The floor of the valley along which it flowed, although covered now with a layer of dark brown gravel, contains in many places good soil not far from the channel of the stream which could easily have been irrigated and brought into cultivation. No attempt seems ever to have been made, nor are there the faintest indications of habitation along its banks. Nomad shepherds occasionally enter its valley and traces of their encampments are here and there to be met with. Fragments of pottery, so common on the present waterless dasht along the channel of the Rud-i Biyaban, are non existent along the banks of the Sana Rud ». Nevertheless I believe, despite Tate's discouraging information, that it would be well worthwhile exploring the course of this ancient bed of the Hilmand again.

(8) Visited on November 25th with Mr. Valentini.

(9) The second visit took place on November 17th. We were accompanied by Messrs. Frascarolo, Graziani and Valentini.

(10) Stein, Op. cit., pp. 927-928.

(11) N. Annandale - H. G. Carter, *Notes on the vegetation of Seistan, Journal and proceedings of the Asiatic Society of Bengal*, N.S., 15, 1920, pp. 267-297.

(12) The sketch of the area was made by Mr. Frascarolo.

(13) E. F. Schmidt, *Persepolis*, I, The University of Chicago, Oriental Institute Publications, LXVIII, Chicago, Ill., 1953, fig. 30, p. 69 (Apadana); fig. 52, p. 109 (Tripylon); fig. 92, p. 219 (Darius' Palace); fig. 95, p. 233 (Palace of Serse); see also the above mentioned Harem, fig. 103, p. 245 and the above mentioned Palace; See Vanden Berghe, *Archéologie de l'Iran Ancien*, Leyden, 1958, pp. 31-34.

(14) Herzfeld, Pasargade, *Archaeologischen Mitteilungen aus Iran*, 1, 1929-30, pp. 4-16; Ali Sami, *Pasargadae, The Oldest Imperial Capital of Iran*, Publication No. 4 of the Learned Society of Pars, Shiraz, 1956, plate on p. 49; see also the forementioned *Private Palace*, ibid., plate on p. 54.

(15) R. D. Barnett, *Persepolis, Iraq*, XIX, 1957, p. 74 ff; (Pasargadae and the sources of Achaemenid art and Architecture).

(16) Schmidt, Op. cit., fig. 65, p. 140.

(17) G. De Francovich, *Premesse e fondamenti dell'arte bizantina e medioevale nelle antiche civiltà orientali*, III, (Course of university lectures edited by Dr. L. Cochetti Pratesi), Rome, 1960, p. 106 ff.

(18) Fairservis, Op. cit., p. 48, figs. 17 and 18.

(19) Ghirshman, Op. cit., plate III (Period I) and plate IV (Period II).

(20) Fairservis, Op. cit., p. 51 and fig. 17 k-t.

(21) Ibid., fig. 17, n.

(22) Ibid., p. 40.

(23) Where they are often found associated with a fine, if scarce, grey ware. I have unable to associate these materials which I collected in the course of 1960 with the tumuli visited by Stein in approximately the same place, see Stein, Op. cit., pp. 951-953.

(24) H. Schmidt, « Archeological Excavations in Anau and old Merv », in Pumpelly, *Explorations in Turkestan, Expeditions of* 1904, Washington, 1908, p. 139, fig. 156 and p. 147, fig. 221.

(25) Fairservis, Op. cit., fig. 17, i-j (Nad-i Ali thick ware) and fig. 18, h-i.

(26) A clay paste, identical with the one described here, was noted by Fairservis, Op. cit., at Gardan Reg (Seistan Coarse Tempered).

(27) Ghirshman, art. cit., plate IV, NA 75.

(28) G. Contenau - R. Ghirshman, *Fouilles de Tépé Giyan, près de Nehavend*, Paris, 1935, for example, plate 19.

(29) R. Ghirshman, *Fouilles de Sialk II*, Paris, 1939, Plates II, 4, XXXVIII, s. 438 etc.

(30) J. M. Casal, *Fouilles de Mundigak, Mém. de la Délégation Arch. Franç, en Afghanistan*, XVII, Paris, 1961, fig. 50, No. 14, Période I; cf. p. 170 and fig. 78, No. 275 Période IV, p. 193.

(31) Schmidt-Pumpelly, Op. cit. Plates 10, 1 and 17 and 19, 5.

(32) S. P. Tolstov and. M. G. Borobieva, Keramika Choresma, Moskva, 1959, see the Comparative plate on p. 75.

(33) These last two classes can be found in many other historical sites of the Sistan.

(34) Possibly to be related to the painted ware found at Nad ʿAli II, see Ghirshman, *Rev. Arts Asiatiques*, art. cit., p. 18, plate IV.

(35) Ibid, p. 16, plate III and p. 18, plate V.

(36) See, for example, the small maps by Fairservis, Op. cit., p. 99, fig. 49 a-d. with the distribution of the various archeological sites according to periods.

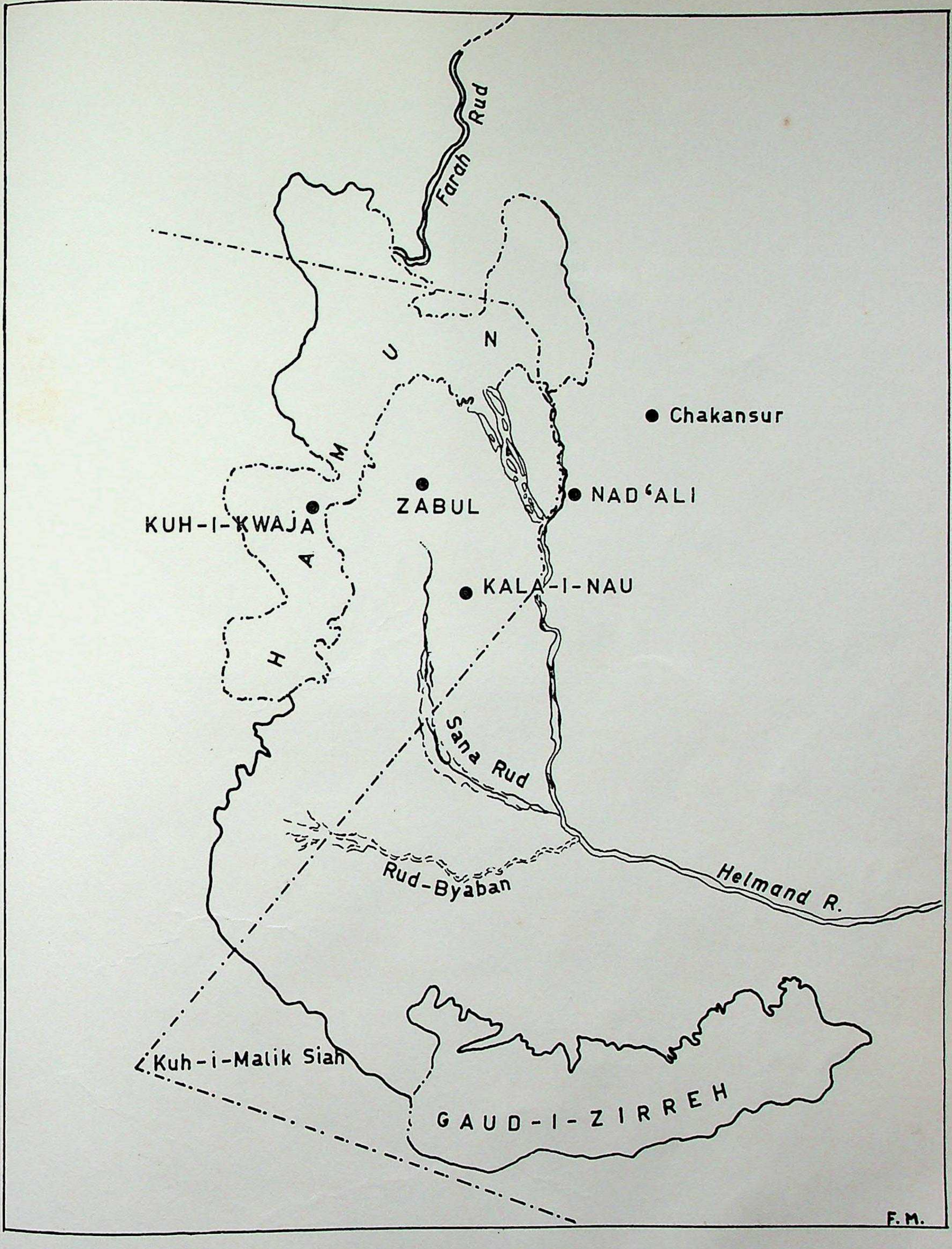
(37) The ancient and medieval sources were collected by H. C. Rawlinson, « Notes on Seistan », *Journal of the Royal Geographic Society*, 43, 1873; pp. 272-294; F. W. Thomas, « Sakastana », *Journal of the Royal Asiatic Society*, 1906, ,pp. 181-216; Tate, Op. cit., p. 1 ff.; Herzfeld « Sakastan », art. cit.; see also the brief outline by Fairservis, Op. cit., pp. 30-36.

(38) Herodotus, VII, 67.

(39) For example, in *Apdīh ut sahīkīh i Sīstān* (The wonders and curiosities of Sistan), see J. M. Jamasp-Asana, Pahlavi Texts, Bombay, 1913, p. 25. See the transl. of J. J. Modi, *Aiyâdgâr-i-Zarirân, Shatroihâ-i-Airan, and Afdiya va Sahigiya-i-Sistân*, Bombay 1899, pp. 122-27.

(40) I quote the translation of Stein, Op. cit., p. 923 (See Darmesteter, *Le Zend Avesta*. II, Paris, 1892, p. 634).

(41) It should be kept in mind, however, that the problem of the exact location of the site of the *xvarenō*, the *Vouru.kaša* sea, is highly complex and debatable and is still uncertain; some identify the *Vouru.kaša* sea with the Caspian (for instance, L. H. Gray, The *Foundations of the Iranian Religions, Ratanbai Katrak Lectures*, The Journal of the K.R.C.... Oriental Institute, 15, 1929, p. 123) whereas for others it is the Lake of Aral (H. S. Nyberg, *Die Religionen des Alten Iran* (German translation) Leipzig, 1938, pp. 251, 258, 402, who at the same time criticizes the identification with the Caspian). In reference to the Avestic geography and the religious tradition of ancient Iran, it should be noted that we should speak primarily of symbolic geography (see H. Corbin, *Terre Celeste et Corps de Resurrection*, Paris 1960, pp. 48-62); but this « géographie visionnaire », of course, has a basis in reality.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Chakansur
ZABUL
NAD'ALI
KUH-I-KWAJA
KALA-I-NAU
Sana Rud
Rud-Byaban
Helmand R.
Kuh-i-Malik Siah
GAUD-I-ZIRREH
F. M.

Fig 1. - Schematic map of Sistan

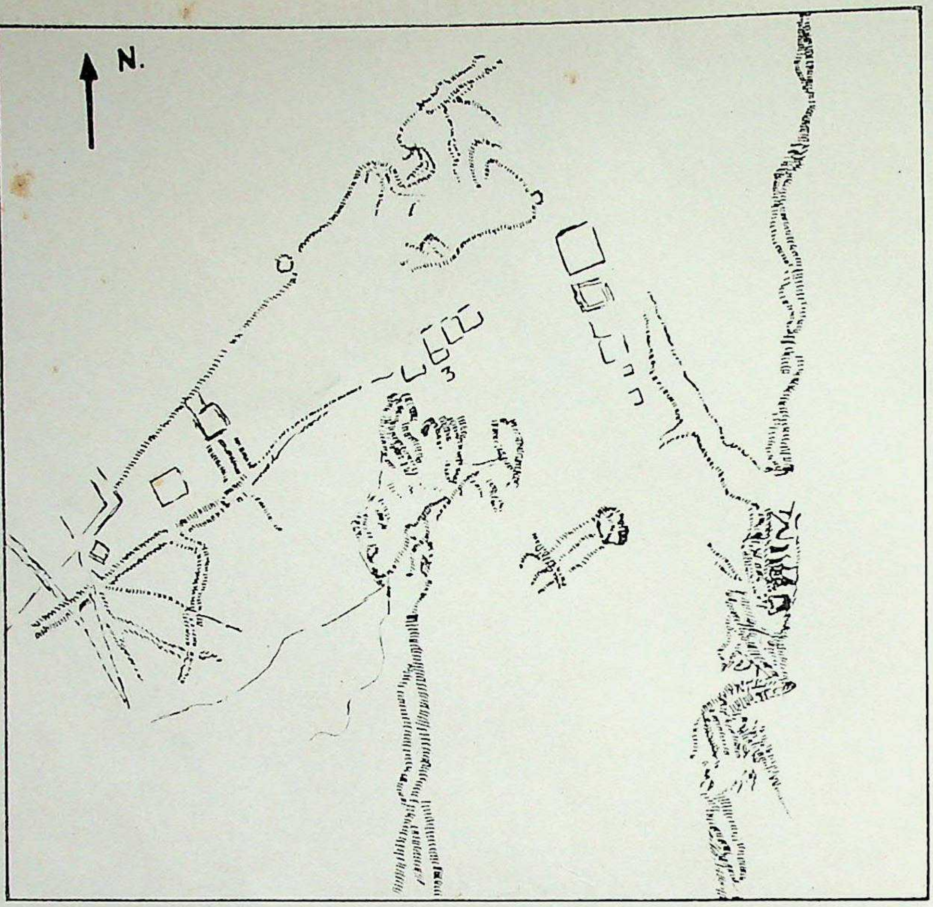


Fig. 2. - Sketch of the Shar-i Kuna near Qal'ah-i Nau (Kala-i Nau).

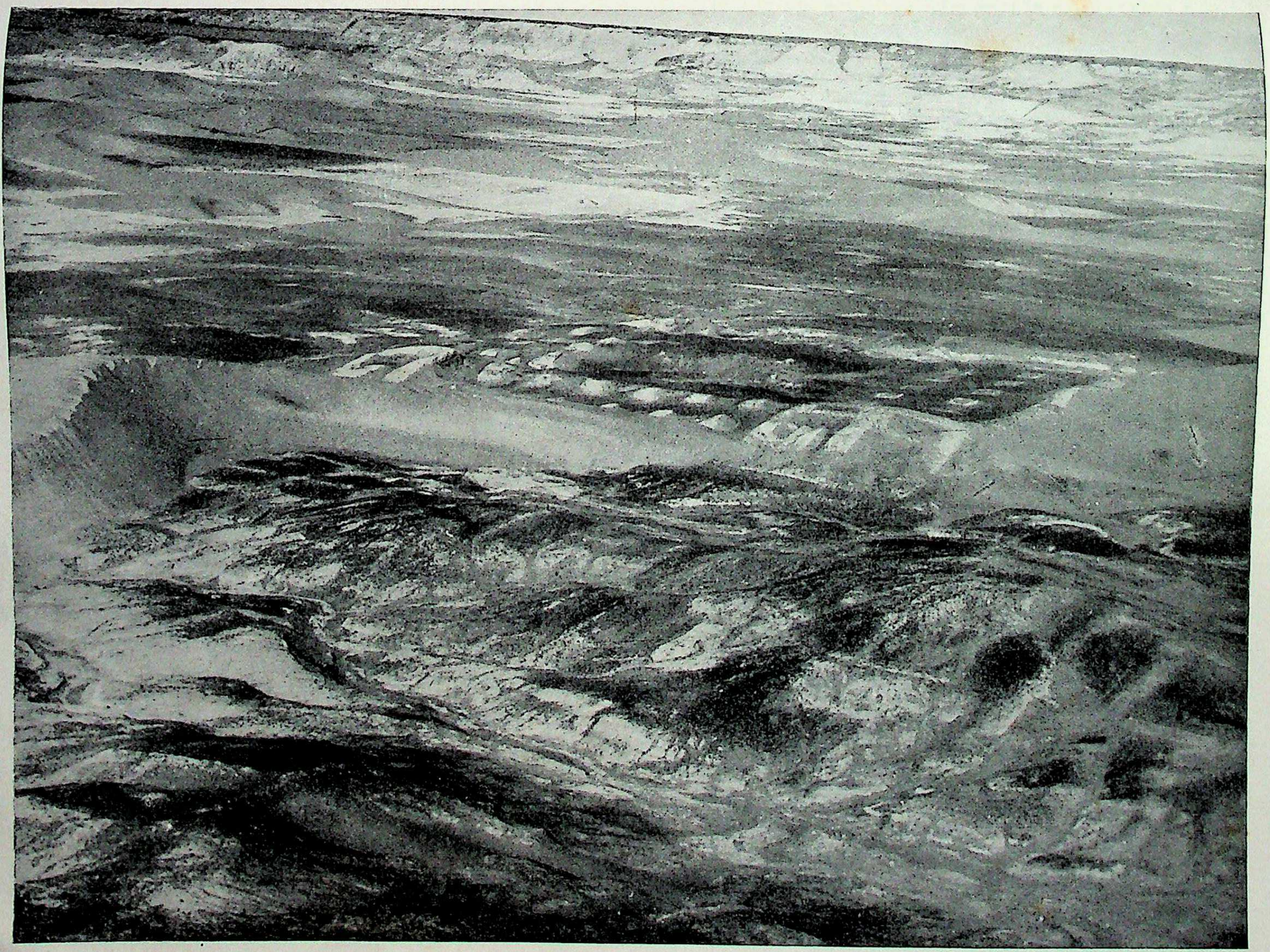


Fig. 3. - Building no. 3, as seen from the west border of the desert. In the foreground, remains of other buildings.

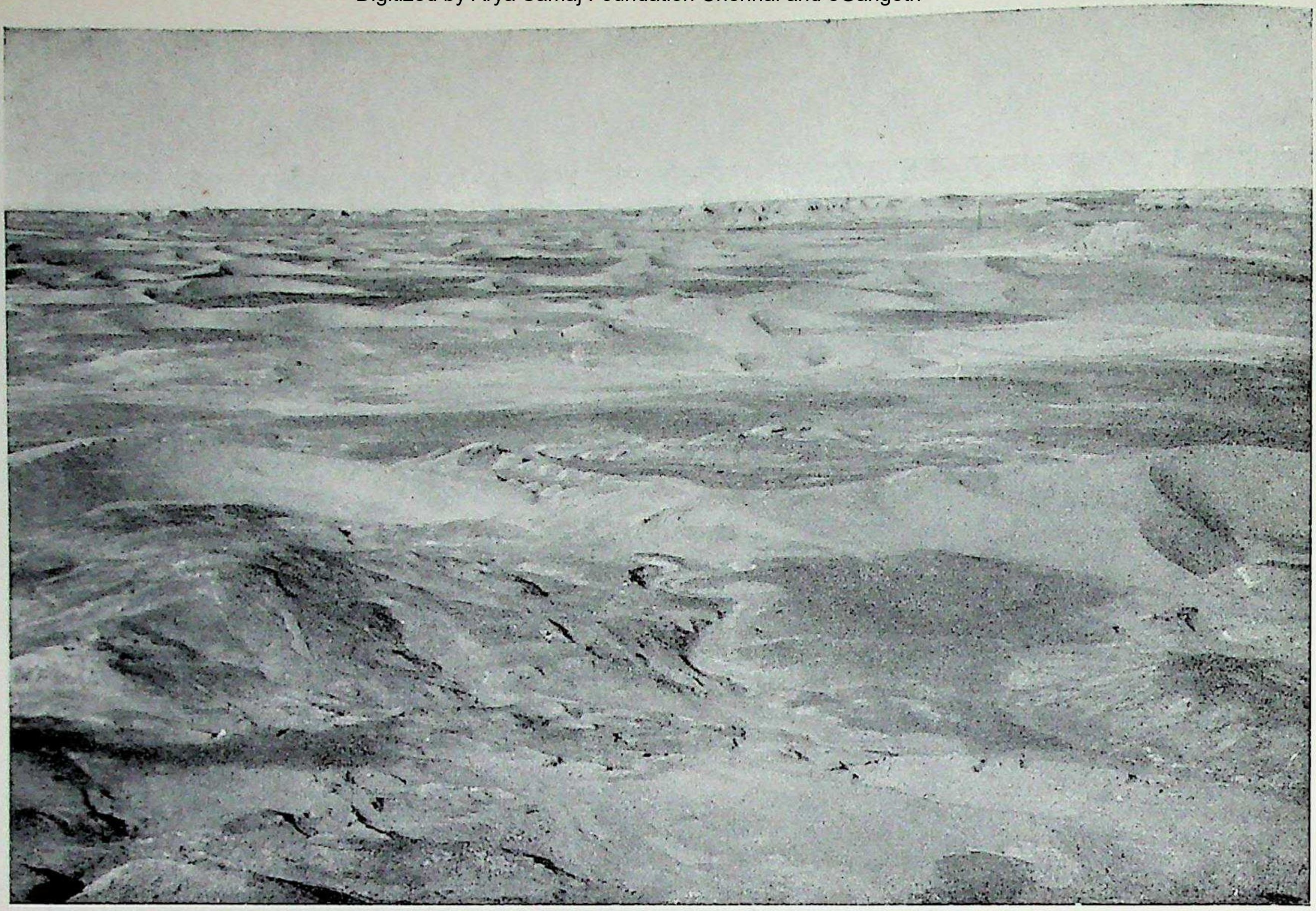


Fig. 4. - View on the plain, towards the north, from the height of the desert, with the grounds of Qal'ah-i Nau invaded by the dunes.

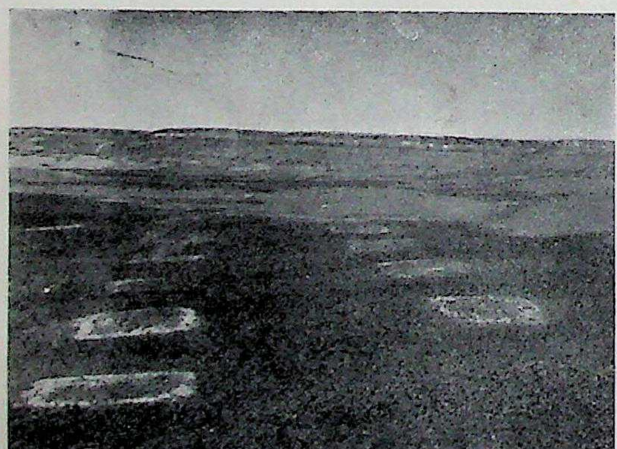


Fig. 5. - The pillars of the portico, on the south side, as seen from the west.

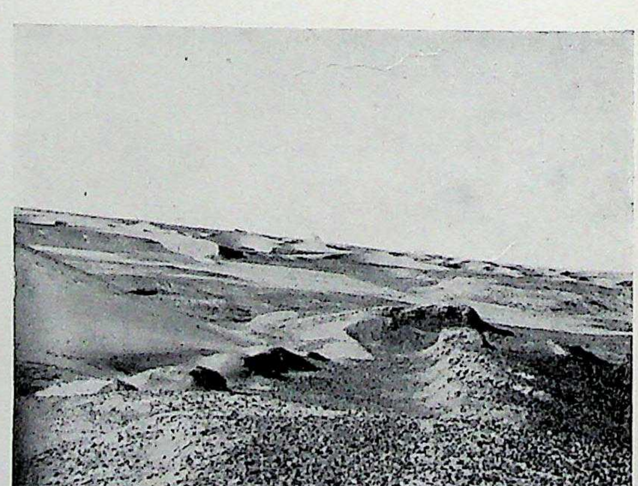


Fig. 6. - The portico on the west side, as seen from the south. In the background, the wall of the corner room N. W.

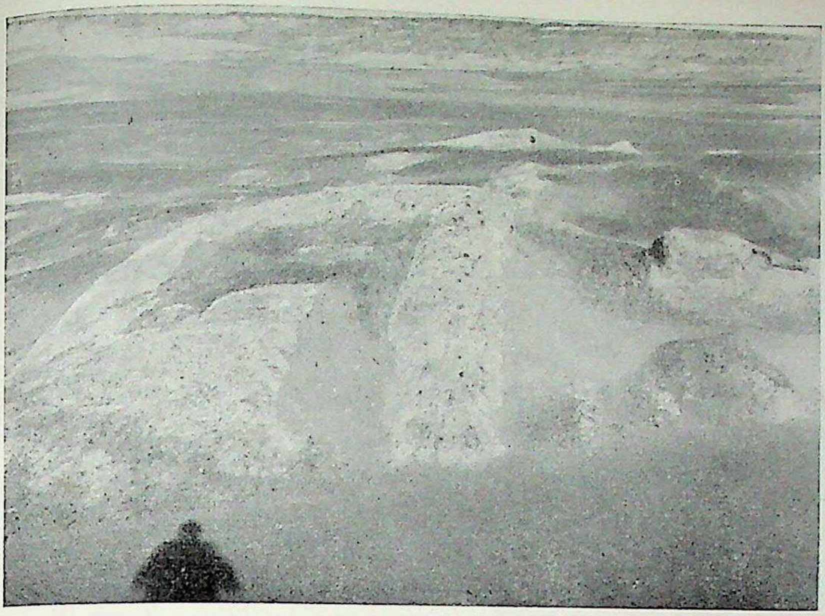


Fig. 7. - The corner room N. W., as seen from the west, and the two last pillars of the portico on the west side.

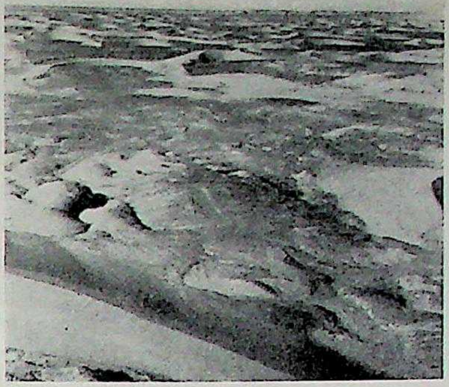


Fig. 8. - Remains of buildings, laid out on a quadrangular plan, at the border of the desert.

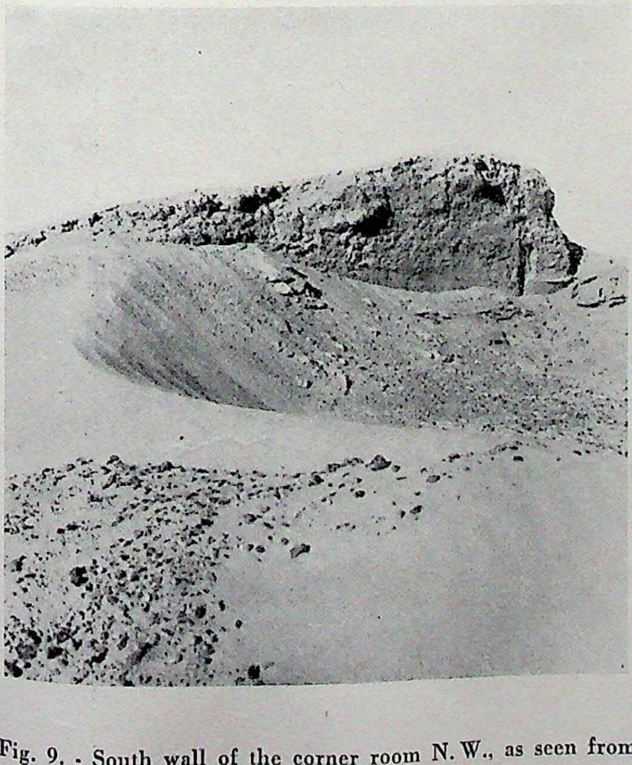


Fig. 9. - South wall of the corner room N. W., as seen from the portico on the west side.

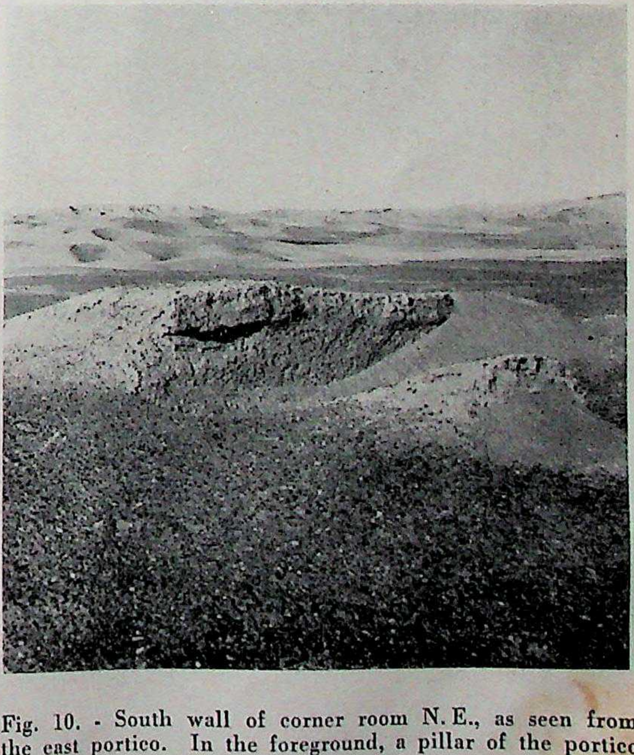


Fig. 10. - South wall of corner room N. E., as seen from the east portico. In the foreground, a pillar of the portico appears on the surface.

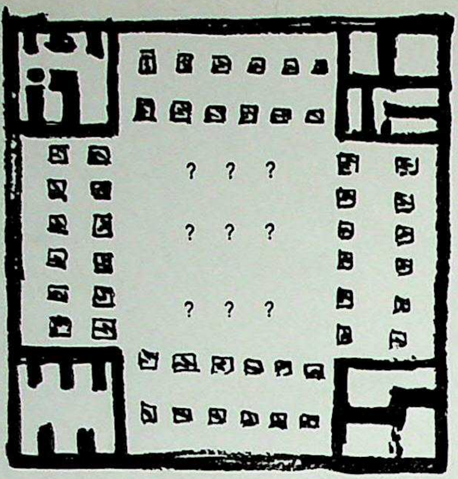
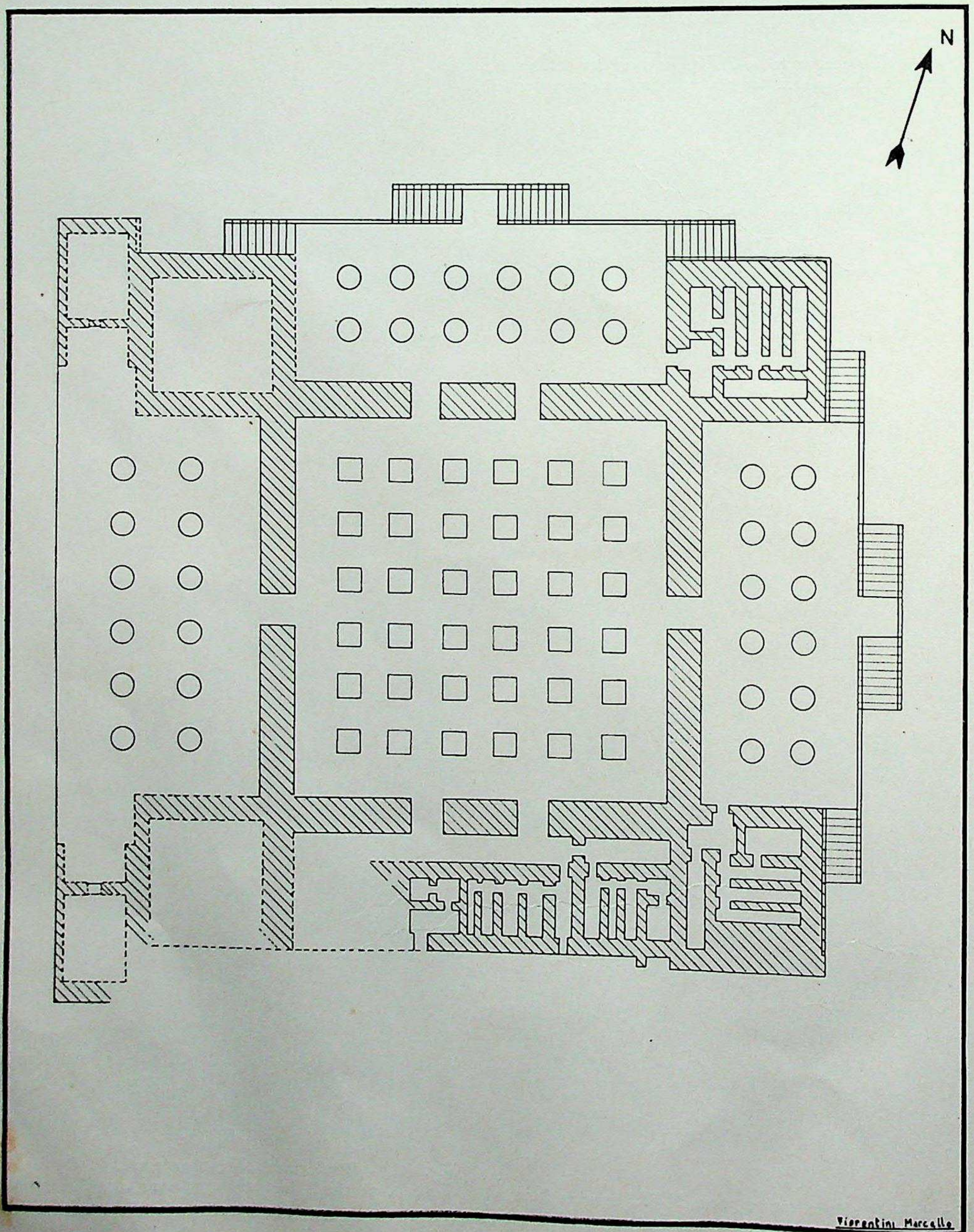


Fig. 11. - Sketch of the structures of building no. 3, appearing on the surface.

Fig. 12. - The Apadana of Persepolis.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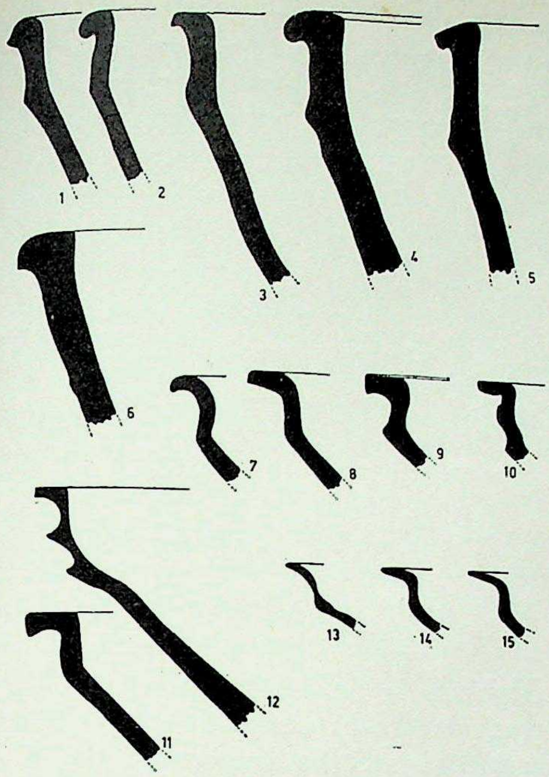
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Fig. 13. - Qal'ah-i Nau, common type of pottery I a,

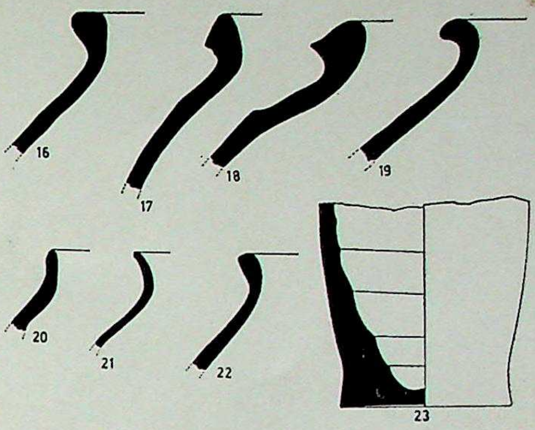
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Fig. 14. - Qal-ah-i Nau. Common type of pottery I a.

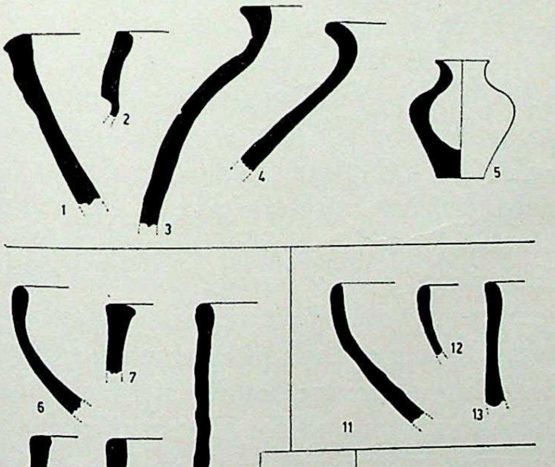
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Fig. 15. - Qal'ah-i Nau. Nos. 1-5 common type of pottery I b; nos. 6-10 common type of pottery I e; nos. 11-13 pottery, brown-purple IV; no. 14 pottery green-brown-yellow III; no. 15 burnished pottery brown-red IX.

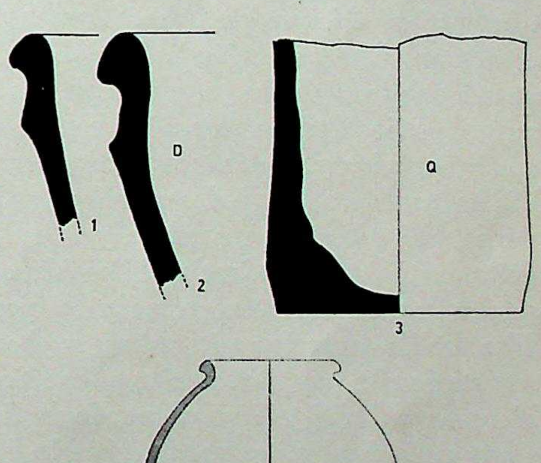

Fig. 16. - Qal'ah-i Nau. Nos. 1-2 and 4 rough pottery II a; no. 3 rough pottery II b.

Fire in Iran and in Greece

Since the rediscovery of the Avesta has made the sources of Iranian religion accessible to us, — since we can read what Zoroaster said —, we have been able to return, with fresh interest, to an ancient idea: that of the Oriental, and especially Iranian, origins of Greek philosophy. It is an idea which Antiquity had endowed with a legendary aura, either by declaring that Pythagoras had been Zoroaster's pupil in Babylon (a city where neither of them had probably ever been) or by writing, as did Clement of Alexandria, that Heraclitus had drawn on « the barbarian philosophy », an expression by which, in view of Ephesus' proximity to the Persian empire, he must have meant primarily the Iranian doctrines.

The problem, studied seriously by the moderns, has often been negatively solved by the great historians of Greek philosophy: but it seems, nevertheless, repeatedly to rise anew like the Phoenix from its ashes, as though the temptation to compare the two traditions and discover a bond of interdependence between them periodically became irresistible.

A little over a hundred years ago Gladisch, a German, in a book and its title *Heraklit und Zoroaster*, 1859, brought together these two fascinating figures, the Iranian prophet and the most complex, most gifted and most obscure of pre-Socratic philosophers. His example was followed, thirty years later, by Chiappelli, in the *Atti dell'Accademia di Napoli*, 1887, and again half a century later by Luigia Stella who wrote in 1927, in *Rendiconti dell'Accademia dei Lincei*, an article entitled: « Eraclito, Efeso e l'Oriente ».

Since the beginning of our own century philology and archaeology have been able to place Ephesus in its historical setting, as a cross-roads in the exchange of products and ideas, and Luigia Stella could avail herself of studies such as that by Max Wundt, « *Die Philosophie des Heraklit von Ephesus in Zusammenhang mit der Kultur Ioniens* » (Archiv. für Geschichte der Philosophie, 1907) or Charles Picard's Book *Ephèse et Claros*, 1922. The distinguished Italian authoress was able to go forward with a broadness of outlook and high critical sense. She had the courage to re-open to question the thesis of her own master, Adolfo Levi, who in his article « *Il concetto del tempo nei suoi rapporti con la filosofia greca fino a Platone* » (Riv. di filos. neoscolastica, 1919) had tried to set the Iranian doctrines of Time at the origins of Heraclitus' speculations. But it would seem that Luigia Stella, in turn, had let herself be carried away into exaggerating the part played by Iran when she termed some of the Ephesian philosopher's characteristics Iranian: the disdain for anthropomorphic images and for the sacrificial cult, the scorn for corpses considered as objects worthy only of being cast away. What is there actually in common between the rite of exposure of the dead, typical of the Magi, and Heraclitus' hostility to all funeral rites? Heraclitus was against some religious practices; he coincided on two points with the Iranian attitude: on the absence of sacred images and on the forbidding of blood-letting sacrifice. But the latter trait is not peculiar to Iran (nor common to all of Iran).

The problem has recently been revived in a very personal approach by Clémence Ramnoux. This philosophical scholar, authoress of a voluminous work whose title itself anticipates its originality — *Héraclite ou l'Homme entre les choses et les mots*, 1959, — confesses in this book that she had suppressed a chapter, originally planned, on the relation between Heraclitus and Iran, because it raised too many difficulties. Later on she herself, understandably with less scruples, was able to publish the material contained in that chapter in the form of an article in a periodical. This article, which appeared in 1959 in *Revue de la Méditerranée,* published in Algiers, is titled: « *Un épisode de la rencontre est-ouest, Zoroastre et Héraclite* ».

We must admit from the very outset that to draw a parallel between Heraclitus and Zoroaster would perhaps require a more thorough knowledge of both of them: on the other hand, to try to explain the personality of one in terms of that of the other is perhaps to claim to explain *obscurum per obscurius*.

Obviously it would be presumptuous here to attempt to draw a well-defined portrait of the obscure philosopher of Ephesus and of the prophet of Iran, and to demonstrate the influence exerted by Zoroaster on Heraclitus. Nevertheless, it has seemed to me, in view of the results achieved in recent years in the study of Heraclitus' personality and in that of Iranian religion, that there might be a specific interest in confronting these two lines of research.

Above all, it seems useful to broaden the bases of the comparison, both on the Greek and on the Iranian side. So we shall come to speak, as we proceed, of:

the heavenly spheres according to Anaximander;

the cosmic fire doctrines of the Indo-Iranians and of Hippasus and Heraclitus;

a purely Iranian development: the doctrine of the Xarenah;

the cosmology of the pre-Socratic philosophers, and the sphere of fire in the cosmology of the Pahlavi texts.

I am particularly pleased to discuss these questions in Italy, both because of the debt I owe Quintino Cataudella for his book, *Frammenti dei Presocratici*, a complete translation of the *Fragmente* of Diels-Kranz, which appeared in 1958 and made the study of these early philosophers a great deal easier than it had been so far, and because of the definitive insights and explanations which I have found in the works of Mazzantini, Maddalena, Mondolfo, and Pagliaro.

I. *Anaximander and the heavenly spheres.*

Anaximander, according to Hippolytus' evidence, taught that the spheres of the stars or heavenly bodies followed one another in the following order, starting from the earth:

the Stars — the Moon — the Sun.

(And we may note that, according to Parmenides, Empedocles, Leucippus and Metrodorus of Chios, it was still the sun that marked the limits of the world).

Now let us look at the Iranian part. The Avesta (Hadoxt Nask 2. 15) teaches that the souls of the dead reach Paradise through three intermediate stages: *humata* (good thoughts), *hūxta* (good words), and *hvaršta* (good deeds). Now, according to the Pahlavi books (Mēnōk ī Xrat, Dātastān ī Dēnīk, Artāg Vīrāf) and the Sad Dar, each of these stages is respectively identified with the place of the stars, the moon, and the sun. So there is a parallelism between the Greek doctrine of Anaximander and the Iranian doctrine.

Nevertheless, there remains a chronological obstacle — as is always the case when we try to make use of the Iranian data: our Iranian evidences are, in fact, of a late date, since the works in which they appear are not earlier — to the extent that they can be dated — than the 9th Century of our own age. At first sight this seems wholly contrary to the idea that this doctrine was taken up from Iran by Anaximander, who lived 1300 years earlier. Nevertheless, our ancient Iranian sources are scarce and lacunar to such an extent that the possibility of such a borrowing remains valid. To make this hypothesis probable or, let us say, credible, we need only demonstrate that in Greece the doctrine in question was a « foreign body », quickly rejected, whereas in Iran it stood within the framework of a system. This is what we shall try to show here.

In Greece it was sufficient that the mechanism of eclipses became known and the occultation of the stars by the moon observed for this doctrine to be abandoned. The eclipses of the sun prove that the moon is nearer to the earth than the sun; the occultation of the stars shows that the moon is nearer to the earth than the stars. One could only remain in doubt, for the second and third position, between the sun and the stars, and that is the reason why Parmenides, Empedocles, etc., could still regard the sun as the limit of the world.

This notion survived in certain quarters, as in the fragment by Celsus cited by Origen, on the spheres of the planets, the last of which was that of the sun.

In Iran the order remained totally unchanged. Now, what is the reason for this order? It is obvious that the stars, the moon and the sun follow each other in the order of increasing light, and this progression is completed in a fourth and final stage, which is the destination point of the soul's journey: one of the names of Paradise is, in fact, *anagrān* « infinite (lights) ».

That we have to do with a progression, a hierarchy, is moreover borne out by the fact that to each stage there corresponds a category of living beings: to the stars, the plants; to the moon, the animals; to the sun, man; to the infinite lights, the gods or God. Now, between these beings, the hierarchy is obvious: plants, animals, men, gods.

We thus have the following system:

Paradise	Infinite lights	God (or the gods)
Good deeds	The Sun	Man
Good words	The Moon	Animals
Good thoughts	The Stars	Plants

On the basis of certain indications, we are bound to believe that this doctrine was ancient, at least as old as the Avesta. In Avestan the moon is called *gao-ciθra*, « which has the race of the ox », and this means that the Avesta was familiar with the astro-biological belief, explicitly taught in the Pahlavi books, according to which the living species were preserved in the heavenly bodies: man in the sun, the animals in the moon, and the plants in the stars. (This view accounted for the fixedness of the species). All this is told mythologically in the Bundahišn: at the death of Gayōmart, the first man, a part of his seed fell on the ground, while another part was collected by the god Neryōsang, « messenger of humans», who took it to the sun to be purified. In the same way the seed of the primordial Bull was borne to the moon. We shall return to this belief shortly, with reference to the fire doctrine, because the vital seed which transmits life, and hence warmth, is therefore a species of fire.

We may even go back to a period earlier than the Avesta, so far as the affinity of man with the sun is concerned. Many names of primal men are traceable, by comparison, to the Indo-Iranian mythology, especially Yama and Manu. The latter, which flourished in the Indian creeds, did not remain in the Iranian tradition except as a survival, in the proper name *Manušciθra*, literally « race of Manu ». As to Yama, in India, he became the King of the dead, whereas in Iran he survived as the first king, the one who established cattle sacrifice, etc. Now, both in India and in Iran, Yama is the son of *Vivasvant* — (in Iranian, *Vivaṅhan*) — a figure about whom very little is known, but whose name, in Sanskrit, is one of the names of the sun. This solar kingship of Yama is borne out, in Iranian, by the constant epithet *xšaēta* « resplendent », which he shares with *hvar*, another name of the sun (from which comes Persian *xoršīd* « sun ») and with Mithra.

This solar nature of Yama provides the key to the doctrine of the Bundahišn, just mentioned above, that the human species is preserved in the sun. In fact, it is natural that the first man, the ancestor of the ancestors, should have been the chief of his descendants, their king. And, as their king, he was descended from the sun, according to a concept fairly widespread everywhere in the world and already observed in Babylon and in Egypt. But this solar character, which be owed to his function, became inseparable from his person. So, when Gaya maretan replaced him, beginning with the reform of Zoroaster, as the first man, he retained the same solar nature 1), which he transmitted to his entire race.

The system we have outlined gives rise to another observation. From the parallelism we have observed it appears that the three terms *humata* « good thoughts », *hūxta* « good words », and *hvaršta* « good actions » themselves form a rising hierarchy. So actions are superior to words which, in turn, are above mere thoughts. This is very different from what was set forth by a Heraclitus, for whom both speech and action are based on thought. The latter is an intellectual doctrine, whereas the Iranian doctrine fits in perfectly with a system almost exclusively preoccupied with morality. In fact, it is worse (to give an example) to be caught committing flagrant adultery than to merely make a declaration of love to one's neighbour's wife, and it is still less of a sin, I suppose, to have merely desired her in one's mind.

So we can explain, through Iran and by means of an organic body of beliefs, Anaximander's doctrine on the spheres of the stars, the moon and the sun.

But the late date at which the ascending scale of the three stages — stars, moon, sun — towards Paradise is observed in Iran gives us matter for reflection. This doctrine may be an Iranian adaptation of the beliefs in the astral destiny of souls, beliefs which were undoubtedly Babylonian in origin and spread throughout the entire East — and the Roman world — towards the first century B.C. In place of the seven planetary spheres, a Babylonian theory, the Iranians, in their ignorance of astronomy, might more simply and according to a naive hierarchy of brilliance, have placed the stars, the moon, and the sun.

This same naive idea might have been at the bottom of Anaximander's theory, without necessarily presupposing a bond of relationship with the Iranian creed.

The second point on which we must broaden our basis of comparison on the Greek side is Hippasus' doctrine of fire. We should not in fact forget, since Aristotle himself tells us so, that Heraclitus was not the only one to have proclaimed fire the principle of all things: as we read in the *Metaphysics* (A 3.984 a 7), « Hippasus of Metapontium and Heraclitus of Ephesus say (that the primary element is) fire ». And Simplicius, Aetius and Clement of Alexandria all report the same thing in more or less detail. We read, for example, in Simplicius (who took this information from Theophrastus): « Hippasus of Metapontium and Heraclitus of Ephesus both say that the One is in motion and limited, but they made fire the principle, and they make things derive from fire by condensation and rarefaction, and dissolve them in fire anew, as though this nature alone were their foundation ».

II. After these preliminary observations, the second of which, as we have seen, somewhat limits Heraclitus' originality by attributing a Pythagorean precursor to him, we can begin to deal with the fire doctrine in Heraclitus and in Iran.

Let us begin with Heraclitus. There are at least four fragments which expound Heraclitus' reflections on fire. The first is transmitted to us by Clement of Alexandria and by Plutarch: « This cosmic order, which is the same for all, was not made by any of the gods or of mankind, but was ever and is and shall be ever-living fire, kindled in measure and quenched in measure ». The second fragment is from the same source: « the transformations of fire: first, sea; and of sea, half is earth, and half fiery water-spout ».

The third fragment is transmitted by Plutarch: « all things are counterparts of fire, and fire of all things, as goods of gold and gold of goods ».

Similarly, Maximus of Tyre reports that, according to Heraclitus, « fire lives the death of the earth, and air lives the death of fire, water lives the death of air, and earth that of water.» Finally, a fragment of Hippolytus, without expressly naming fire, names lightning, which is probably the same thing: « The thunder-bolt steers all things.»

Another passage by the same author, in which fire is said to be due to judge all things at the end of the world, was suspected by Reinhardt (*Hermes*, 1942, 22) of merely being a Stoic and Christian interpretation of the Heraclitean doctrine of fire; but its authenticity has recently been vindicated (see Zeller-Mondolfo, *La filosofia dei Greci*, I, IV, 221 e 251).

Turning now to Iran, we will first of all examine the gathas of Zoroaster. The role of fire in them is fundamental. Twice Zoroaster calls upon « the fire of Ahura Mazda », either to make offerings to it (Y 43. 9) or to acknowledge its protection (Y. 46. 7). More frequently (in all the other passages, to be precise) fire is characterized as an instrument of ordeal. Ordeal is not found in the gathas as an actual practice, except for one single mention of it (Y. 32. 7), but several times there is reference to a future ordeal which is to be made by means of fire to separate the good from the wicked, and which Zoroaster invokes. Here fire is the instrument of truth or justice (*aša*), from which it derives its power (hence the epithet *aša-aojah*). This connection of fire with *aša* is constant; it appears again in a passage I have mentioned (Y. 43. 9), which may be translated: « I wish to think, insofar as I am able, of making unto thy fire (O Ahura Mazda!) the offering of veneration for *aša* ». In other words, to venerate *aša*, offerings are made to the fire of the Lord. In the same way, when each of the elements or each of the categories of beings of the universe are placed under the protection of the Entities which surround Ahura Mazda, *Aša* is the patron of Fire.

Now the question arises: could this doctrine of the gathas have been known to Heraclitus? Neither the date nor the place of Zoroaster's reform are known with certainty, but it is probable that it occurred at the beginning of the Sixth Century B.C., in north-eastern Iran. We do not know what of it may have reached the West of the Persian Empire at the time of the early Greek philosophers, when the cities of Ionia bordered on this empire and were incorporated into it.

What we do know is that Darius worshipped Ahura Mazda, standing before the altar of fire. At Naqš i Rustam, near Persepolis, on the façade of his rock tomb, he is shown standing on a great throne borne up by slaves, before a fire-altar, with his right hand raised in sign of adoration and his left holding up a bow resting on the ground. Between the king and the altar, and above them, hovers the winged disc with the bust of Ahuramazda.

On the other hand, in a Fifth Century relief found at Dascylium (capital of the satrapy of Asia Minor on the sea of Marmara), we see two magi with their mouths covered by a veil, as is the custom to this day among the Parsee priests during the sacrifice, holding the ritual twigs. Below them are the head of a bull and one of a ram, obviously intended for the sacrifice. In front of them there is a column, surmounted by a sort of abacus or table, possibly a fire altar. Here is the idea which Heraclitus may certainly have had of the magi who, besides, are mentioned in one of the fragments of his which have remained, but promiscuously with the « noctambules, Bacchants, Maenads, initiates » whom he accuses of impiety.

But what could he have known of the *doctrines* of the magi, and especially of their fire doctrine? To answer this question we must extend our Iranian inquiry, searching elsewhere than in the gathas of the prophet, which at that time were perhaps still unknown in Asia Minor.

In Medieval Iran, and already partly in the Avesta — and we shall see that these ideas are probably more ancient — different species of fire are distinguished, and there are even three ways of classifying fires.

First of all, in contrast to the normal fires, Ādarān, there was the fire Varhrān. This was the fire of the highest species. It is said that this fire had the power of attracting all the gods to itself: when the heavenly gods come to earth, we learn from two Pahlavi texts (Denkart, 522. 21 and Pahlavi Rivayat, Dhabhar 57. 10), they go first of all to the fire Varhrān, and only after that to other places. The fire Varhrān, preserved in the temples of the first magnitude and importance, is treated like a king; a crown is suspended above it. Many Pahlavi texts call him « the king of fires ». The ceremony of his installation is called enthronement; perhaps this gives us the key for the interpretation of a feature which is found very frequently on the obverse of the Sassanid coins. These coins almost all have an image of a fire altar. Now, on many of them, the altar appears with lions' paws, the presence of which has never been explained. In view of their resemblance to the feet of the throne or seat of the Achaemenid sovereigns, as we see it portrayed on many reliefs, these lions' paws seem to me clearly intended to give the altar the appearance of a throne and, consequently, to endow fire with the dignity of a king.

There is a second classification: in a certain sense, it completes the first, because it concerns three fires, called *Farnbāg*, *Gušnasp* and *Burzēn-Mihr*, patrons respectively of the three social classes, — priests, warriors, farmers. So that, by adding the fire Varhrān to them, we have the entire society.

The two classifications considered so far concern only the ritual fires (Varhrān, Adarān, Farnbāg, Gušnasp and Burzēn-Mihr). There is also a third classification, which seems more general, in which a physical theory is reflected, and which consequently allows us to set them in relation to the early philosophers of Ionia, of whom Heraclitus was one.

This classification (found in the Avesta, Y. 17. 11, and in the Bundahišn, chapter 18) distinguishes five fires:

1. *Berezisavah*, which shines before the Lord;
2. *Vohufryāna*, which is found in the body of men and of animals;
3. *Urvāzišta*, which is found in plants;

4. *Vazišta*, which fights against Spenjagrya among the clouds;
5. *Speništa*, which is used for work.

This classification presupposes a physical doctrine on the universal presence of fire. But for the moment we must pass over the first and the last: we may observe that the other three form a system; for (reading from the bottom up) the fire of lightning (that which fights with Spenjagrya, demon of the storm, among the clouds) brings on the rain which nourishes plants, from which we can get this fire by rubbing together two pieces of wood, and the plants nourish the animals and men in whom fire becomes vital heat.

It would seem that a confusion arose between the first and the fifth fire, since speništa (the name of the fifth fire) means, despite the definition given it, « the most sacred », which, rather, corresponds to the definition of the first fire.

In any case, the doctrine of vital and cosmic fire is very ancient, although it has been modified in the course of time. So it is, in fact, not by chance that India, especially in the Chāndogya-Upaniṣad, is acquainted, just like Iran, with a classification of fires into three types, and one into five types, and that the three fires of the former classification are, as in Iran, ritual or sacrificial fires, and — what is even more important — that these correspond identically to the three Iranian fires and social classes:

Farnbāg...	Priests...	*Āhavanīya*...	fire of the oblation to the gods
Gušnasp...	Warriors...	*Anvāhārya* (*dakṣina*)...	fire which wards off demons
Burzēn-Mihr...	Farmers...	*Gārhapatya*...	domestic fire.

The comparison has been made by Dumézil, *Hommages Herrman*, 1960, 321, and illustrates yet again the tripartite ideology of the Indo-Europeans which this scholar has so often pointed out.

The other Indian classification, that distinguishing and defining five fires, is the one which concerns us most here: we readily observe in it a doctrine of vital and cosmic fire similar to that of Iran; these are the names and characteristics of these fires:

asau lokaḥ, the heavenly world, from which Soma is born,

parjanyaḥ, the storm, the tempest, from which rain is born,

pṛthivī, the earth, from which nourishment,

puruṣaḥ, man, from whom sperm,

yoṣā, woman, from whom the embryo.

It is clear that at the base of such a classification lies a primitive theory of the fiery nature of the vital fluid or sap which runs through the entire scale of beings. And here is undoubtedly still another reflection, which is very ancient, of the same theory: Apām Napāt, a divinity certainly Indo-Iranian in date, and whose name literally means « grandson of the waters » is called in the Avesta (Yt 19. 52) « the god who created men (males), who fashioned men ». Why specifically males, if not as the repositories of the fluid which transmits life and which originates in lightning?

The Iranian fire rituals permit us, in the same way, to make two other interesting deductions. The fire Varhrān is made up of a number of different fires, brought together and ritually purified. Now, one of these fires comes from lightning.

One the other hand, it is forbidden to let the rays of the sun fall on the sacred fire: for the fire of the altar itself symbolises the sun; or rather, it *is* in a certain way the sun, before which the other sun must disappear.

III. Any discussion of the fire doctrine of Iran would be seriously incomplete without the mention of the *X^varenah*, one of the most renowned ideas of Iranian civilization and which seems to lie at the origin of the aureoles of the saints of Buddhism, Christianity, and Islam. There is not enough time or space here 2) to explain the reasons which make it necessary to return, contrary to Bailey's thesis, to an etymology of the word *x^varenah* put forward about a hundred years ago, and which related it to *x^var*, « sun », and hence to Sanskrit *svar* and its derivative *svarṇara*, a term which seems to have designated the heavenly source of soma, the sacred, invigorating liquor. So the

x^varenah must be an emanation of the sun, the heavenly fire, a luminous life-force which is communicated to men.

Now, this fluid is transmitted primarily to the head because, as Onians 3) has ably demonstrated, for the ancient Greeks, Latins, etc., this was the seat of vital power or strength.

The figures (accompanied by the word ΦΑΡΡΟ or ΦΑΡΟ) with a diadem and an aureole, which we find on certain Kušana coins, undoubtedly represent the same concept. We must nevertheless admit, in agreement with Bailey, the possibility of the transportation and transposition of attributes in a religion as obviously composite as that of the Kušanas was.

But another type of portrayal of the *x^varr* was more sheltered from outside influences. It is the one appearing on the Sassanid coins, on which in general we find the expression of Mazdaean orthodoxy. These are, specifically, certain coins of Ohrmazd II, of Sapor II, of Varhrān V, and of Valaš: on the fire altar a human head is shown, in the case of the first two in the flames of the altar; in the case of the other two, with no other flames but those radiating from the head itself.3bis). This figure is sometimes interpreted as being that of Ohrmazd, and we are referred in this respect to the Achaemenid reliefs. But on the latter Ahuramazda is not *in* the fire: he hovers *above* the fire (when there is any fire shown), or rather, he dominates the entire scene, above the fire and the king. In the Sassanid portrayals, the head is on the altar, in the fire (or instead of it). So we can see in these, in agreement with J. M. Unvala (Kharegat Memorial Volume, p. 52) « Fire » itself, the Αθšο of the Kušana coins. One can even specify which fire: since the head is, in both cases, crowned, since these are royal coins, and since, as we have seen, the altar is sometimes given the appearance of a throne by the addition of lions' paws to it, we must come to the conclusion that this is the fire *Varhrān*, the fire of kings and king of fires. But if that is the case, another possibility arises. According to the evidence of Zātspram the *x^varr* has its seat in the fire Varhrān. So perhaps it was the *x^varr* that was meant to be portrayed. Must we therefore, choose between these two interpretations: Ātar or X^varr? Perhaps the two are not mutually exclusive: perhaps the intention was to portray, even more than the residence of one within the other, the fundamental oneness or identity of the heavenly Fire, son of Ahura Mazda, and of the X^varenah, the splendour that emanates from the sun to give men life and happiness.

The parallelism between fire and the X^varenah is further borne out by the fact that as the X^varenah — according to the Avesta — protects the king and the three social classes, so there is a fire specifically for the king (the fire *Vahrān*) and one for each of the social classes.

In short, the doctrine of the X^varenah appears to us to be a special development — particular to Iran — of the Indo-Iranian doctrine of fire.

And now it is time to conclude on this third point. In the Indo-Iranian religion, and afterwards in the most ancient religion of Iran, it seems that there existed a rudimentary cosmology of fire. Heraclitus may have heard of it. Certainly his acquaintance with the Milesians and Hippasus would have been sufficient for him to have some information on such a system of physics. But it is not unlikely that it was due to the suggestiveness of the doctrines of the magi that he chose, among the various kinds of physics which were widespread from Thales on, one which assigned the basic function to fire.

This probability would be increased, by convergence, if we could demonstrate that both in Iran and with Heraclitus fire was associated with an abstract principle, universal truth or justice. But I have discussed this elsewhere.4)

IV. Perhaps an influence in the opposite direction is illustrated in our fourth and final point.

The image of the world appears to us, according to the pre-Socratic philosophers, as a fiery sphere suspended in the subtle and divine ether, which more or less penetrates it 5). In Iran we again find something similar in the cosmogony, but this does not occur before the Pahlavi books, dating from the 9th century.

According to chapter I of the *Bundahišn*, 26, Ohrmazd, in order to create the world, made « a form of fire, luminous, white, round, and visible from afar ». What was this form? We are not told.

But we read a little further on, in paragraph 29 of the same chapter, that Ohrmazd extracted from infinite light a form termed *asar* or *asarak* or *asrōk*, depending on the manuscript, in which all creatures were contained, which was outside of time and from which emerged the prayer ahunvar. Here there is a point which remains obscure: what is the meaning of this adjective *asar*, or *asarak*, or *asrōk*, and how is it to be read?

The most reliable manuscript, the Parisinus, gives *asrōk* and this term is often interpreted as an adjective derived from the noun of learned or scholarly origin *asrōn* (from the Avestan *aθravan*) « fire-priest ». But the regular formation, in parallel with the abstract *asrōnīh* which is observed in *Dēnkart*, 204, 4, where it goes with the word *brahm*, « priestly garment », should be *asrōnak* or *asrōnīk*. This seems to have led Zaehner, *Zurvan*, p. 303, to reject the reading *asrōk* and to adopt *asar* (of which *asarak* seems to be but a negligible variant) from whence his translation: « Infinite Form » [6]).

Nevertheless, we fail to grasp the meaning of this « infinite form » issued from infinite light. And, on the other hand, *asrōk karp* appears again in the *Dātastān ī Dēnīk*, chapter 64. Here, to eliminate this « awful body of a priest », as he says, Zaehner, BSOAS 1959, p. 367, coolly emends *asrōk*, as it reads in the K35 manuscript (*Dātastān*, folio 177 verso, line 2) into *asar* and translates: « infinite form (or without a head) ».

Now, not only does he make this correction in such an entirely arbitrary fashion, but he pays no attention to another appearance of the same word, three lines further on, where we read this time that « in this *asrōn karp* there was, etc. ». Shall we therefore find it necessary to readmit the « form of priest »? I thought so at first [7]), but a closer examination convinced me that I was mistaken.

In fact, the text of the *Dātastān* tells us that « the light of this form was that of fire », and, on the other hand, the word written above as *asrōn* does not actually end with three vertical dashes, but with only two, so that it may be interpreted as *āsrō* (with the sign for the end of a word), that is, Avestan *āθrō*, genitive of *ātar* « Fire » [8]). The graphic representation *asrōk* is equally susceptible to interpretation as *āsrō* with *ōk* noting final *ō*.

This interpretation of ours is corroborated, as Gherardo Gnoli has pointed out to me, by two other Pahlavi passages.

In the first, the *Pahlavi Rivāyat*, p. 128 (Z7 in Zaehner, *Zurvan*, p. 361), there is a mention of the creation, starting from infinite light (*hac 'ān ī asar rōšnīh*), of a luminous instrument of fire: *awzār būt cēgōn x^varag i ātaxš i 'pat rōšnīh 'pāk*; and that, beginning with this instrument, all creation was made. We see, therefore, that that instrument is none other than our sphere of fire.

In the second passage, *Dēnkart*, 349, 4-5 (Z 10 in Zaehner, *Zurvan*, p. 371), we read what this instrument was called in Avestan: *'i-š apistākīk 'nām asrōk karpak*, which we must translate: « whose Avestan name is *āθrō kehrp* [8]), that is, « form of fire ».

What had been taken for a « body of a priest » or « infinite form » is therefore a « form of fire », and this is none other than the « form of fire, luminous, white, round, visible from afar » of which the Bundahišn spoke a few paragraphs earlier (§ 26).

Thus we are relieved of « multiplying beings », any more than the Creator himself did!

Now, how do we explain the resemblance between this sphere of fire and the pre-Socratic cosmology?

The Pahlavi cosmogony presents at least one feature visibly taken from the Greek physics, namely, creation through successive phases of increasing condensation. Consequently the sphere of fire seems to us to be another borrowing from the Greeks by the Iranians of the Pahlavi period.

* * *

As a general conclusion, summing up our four points but setting them in chronological order, we may formulate four theses:

1. An Indo-European doctrine of the vital force, a luminous and radiant force contained in the head — this is proved by the story of Servius Tullius — underwent a special development in Iran with the *x^varenah*, which was this vital fire as emanated from the sun.

2. Among other cosmologies taught by the early Greek philosophers, Hippasus and Heraclitus proclaimed a doctrine of cosmic fire. A similar doctrine is found in Iran and in India, and was probably already Indo-Iranian. In this Indo-Iranian doctrine fire was associated

with the Truth, *Aša-Ṛta*: as Fire was with the Logos by Heraclitus.[10]

3. Anaximander's spheres: the stars, the moon, the sun. In Iran, the same order corresponded to a hierarchy of living beings: plants, animals, men, gods, and to the successive levels of the soul's journey towards Paradise. What we have here are independent and rather late developments.

4. Finally, there is the pre-Socratic doctrine of the world as a sphere floating in the ether, a doctrine which seems to us to be reflected in the Pahlavi cosmogony, in the sphere of fire, born of infinite light, and which contained all beings.

J. Duchesne-Guillemin

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[1] Besides, Gaya maretan was of himself solar, as K. Hoffmann has shown in *Münchener Sprachw. Stud.*, 11, 85.

[2] But see AION, 1962.

[3] *Origins of European Thought*, 2, 1954.

[3bis] An intaglio in the Bibliothèque Nationale (*Survey of Persian Art*, 255 U) must also be classified together with the first series of such coins.

[4] See *Filosofia*, Turin, 1962; also above, p. 10.

[5] See Guthrie, The Pre-Socratic World-picture, *Harv. Theol. Rev.*, 1952, p. 87 sq.

[6] Cf. already Tavadia, *Studia Indo-Iranica* (*Festgabe Geiger*), p. 239.

[7] *Symbolik des Parsismus*, 1961, p. 99 sq.

[8] This interpretation finds confirmation in the Pahlavi translation, *Vidēvdāt* 3. 2, of Av. *àθravat* ‘provided with fire’: the Pahlavi term ought to be read *āsrō-ōmand*, cf. Kapadia, *Glossary of Pahlavi Vendidad*, Bombay 1953, p. 235, and, for a more detailed discussion, my article in the *Unvala Memorial Volume*, to appear in 1963.

[9] The final *k* in both words indicates that these are transcriptions from an Avestan original. Zaehner saw this (p. 372) perfectly well, but failed to draw from it the proper conclusion for the reconstruction of this Avestan original.

[10] This comparison seems much more plausible, from the historical view-point, than the one envisaged by A. Somigliana, *Monismo indiano e monismo greco nei frammenti di Eraclito*, Padova 1961.

ZEGOMONOKO

Sasanian drachms of the 5th and 6th centuries show often a countermark (1), struck three times on the rim of the coin outside the die; this countermark has been read in the most different ways. Of all these attempts, that of R. Ghirshman (2) has at least the advantage of a rational integration in the historical setting; but it has not remained unchallenged (3). Before we proceed further, let us give the readings hitherto published, of which one (Specht) has now merely a curiosity value.

Drouin: *s-a-h-a-n-a-s-a* (*šahanšah*) (4)

Specht: UTUHULUHK (5)

Junker: (turned by 180°) OYOROMOZΔH = Ohoromozdē (6)

Ghirshman: HAΠATAΛA (7)

Hansen: *hyono-yolo* (or *yaolo*) (8)

Humbach: γηλανοχοηο resp. γιλανο χοηο (χοηο as abbreviation for χοαδηο, γηλαηο as people name). (9)

In the following discussion we shall show that all the readings hitherto offered are incorrect, because all of them are mainly based on the combinatory method instead of criticism of the sources. The new reading will be proposed on the basis of real palaeographic data and will be accompanied by a proper historical comment. Of course a broad palaeographical basis was not hitherto available to scholars who studied these coins. I have for the first time offered one in my work *Grundriss einer historischen Paläographie der Kušānmünzen* (10), in order to obtain a serviceable and tolerably safe starting point.

The script of our countermarks is the continuation of the Greek-Bactrian script, which is derived from the Greek and shows a development already on the Kuṣāṇa coins; its provisional ending stage with a clear transition to cursive can be found on the so-called Kuṣāṇo-Sasanian scyphate coins. The chronological setting of the above-mentioned study is around 400 A.D., because about that time the Kuṣāṇo-Sasanian coins ceased to be struck last king: Bahrān IV 388-399). It is certain that from that date to the time of our countermarks this script underwent a further development, but this process became increasingly slow, as the possibilities of a change in the shapes became gradually exhausted. Local variants of the alphabet without a doubt came into being, and of these a form-district is here represented. In any case, this chronological setting of c. 400 A.D. is the nearest to our countermarks from the point of view of development, and must serve as a starting point. The countermark itself and its details will be dealt with later on. First it is necessary to give a survey of the extent of the countermarking. Up to the moment of writing, I know from the bibliography and from the accessible large cabinets the following coins, all of them Sasanian drachms:

Ruler	*Date* (regnal year)	*Mint*	*Bibliography*
Balāš	no date	?	Gh. 7 (fig. 11; pl. II/5 = Berlin (107)
Kavād I	13	VR ?	BM (145)
	35	PR	BM (144)
	35	ST	BM (146)
	37	DA	BM (147)
	37	MR	Gh. 9 (fig. 13; pl. II/7) corr. (not II/6; also date: not 17) = Berlin (106) =DM LXIV/13.
	41	AI	Gh. 10 (fig. 14; pl. II/9) corr. (not II/7; also date: not 43; also mint: not HU) = Berlin (105) = DM LXIV/14 = DM Man. Fig. 606.

DM Man. p. 457 mentions 27 from AI and 43 from MR, but this is somehow interchanged, because on p. 457 fig. 606 is identical with 41 AI. At the basis of this are apparently the (misplaced) last two mentioned coins 37 MR and 41 AI.

Xusrō I	(1-5)	MR	BM (150)
	5	DA or KA	BM (149)
	8	AIR	Gh. II (fig. 15; pl. II/8; Hermitage Nr. 1271) corr. (mint not ABHR)
	12 ?	VH	BM (148)
	14	NH	Gh. 12 (fig. 16; pl. II/6) = Berlin (108)

It is worthwhile to point out, for future reference, that no overstrike on Hephthalite drachms or other contemporary coins is known.

First of all, I subjected the countermarks themselves to a thorough scrutiny and noticed what follows. The form remains generally unchanged. Technically, it is due to a threefold impression outside the image of the Sasanian drachm on the wide rim, so as not to damage the portrait of the ruler. A rigid coupling of three identical marks, in order to carry out the procedure at one stroke, was made impossible by the varying diameter of the Sasanian dies.

I could ascertain nine different variants (fig. 1) of the same name (A-I) ([12]). They occur:

A on Gh. 7 (B 107) - BM 145 - BM 148

B on Gh. 10 (B 105)

C on BM 146 - BM 150 - BM 149.

C on BM 147 (spelt backward, which fact had passed hitherto unnoticed)

E on Gh. 9 (B 106)

F on BM 144

G on Gh. 12 (B 108)

H on Gh. 11 (Hermitage)

I on BM 145, 14 - BM 108, thus coupled with A, C and G.

This shows that the countermark, in all its slightly varying forms, belongs to one and the same period. Thus e.g. Form A is found on Gh. 7 (Balāš), i.e. on the earliest countermarked coin, as well as on BM (148)=Xusrō I with the year 12 (?), i.e. on the latest but one piece.

Form I knits together even more closely; it is coupled with A on Gh. 7 (Balāš), with C (Kavād, year 35, Xusrō I, years 1/5,5) and with G (Xusrō I, year 14), i.e. with the earliest and the latest of the countermarked coins. *This means that the countermarking took place exactly at the same time and that the time of the countermarking must be very close to the issue year of the latest countermarked Sasanian coin.* Therefore, Marquart did not grasp the si-

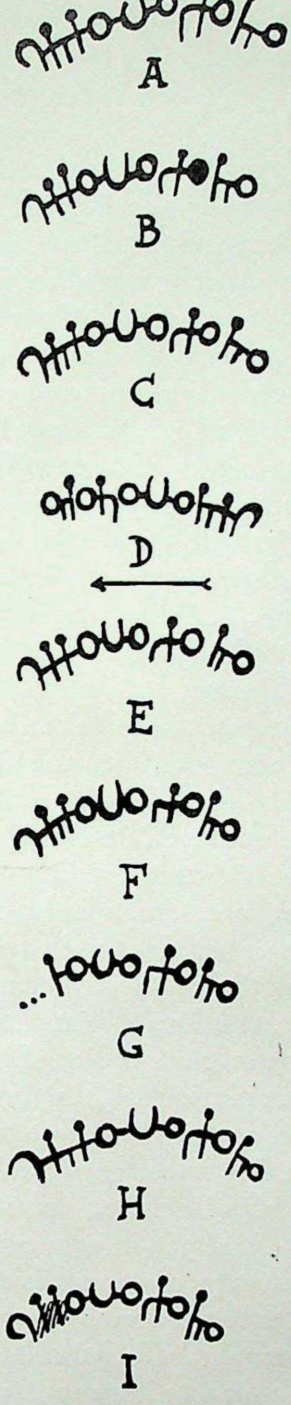


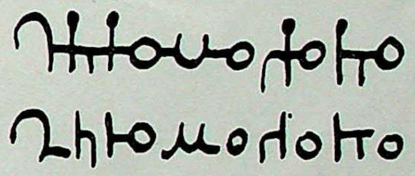
Fig. 1.

tuation (13), because a countermarking of drachms of Balāš does not imply that the Persians paid « tribute » already at the time of Balāš, but only that at the time of countermarking there still was an amount of drachms of Balāš in circulation. Ghirshman makes a similar mistake (14). Humbach does not deal at all with the chronology and speaks of coin legends, which is not the case at all. (15)

The last (latest) absolutely certain date, which can serve as *terminus post quem* for the countermarking, is thus the 14th year of Xusrō I, i.e. 545 A.D. The marking can have taken place only *after* this date. It is quite possible that some other coin of Xusrō I with a later date and the countermarks may yet come to light; but generally speaking the extant stock of coins gives the framework, in which the countermarks are found.

With this date of 545 A.D. we come close to the famous joint action of the Sasanians and the Western Turks, which led to the smashing of Hephthalite power in Central Asia. There cannot be doubt that the Western Turks struck the decisive blow and that the Sasanians on the whole entered the fray later, in order to put a limit to further successes of the Western Turks and to create a sort of equilibrium of power in this region. This decisive blow fell about 560 A.D. (16)

Thus far the material facts. Now we turn to the reading of the legend. I give, from the ascertained variants, a schematic text and place under it the relevant letters according to my palaeographical study. It must be remarked that the following points are typical for the forming of the letters:



a) ligatures over a sort of central line;

b) circular and rectangular forms of letters;

c) in the case of rectangular letters, point-like thickenings of the vertical strokes above like musical notes, which serves also to determine the correct position, above and below.

Accordingly, we have to read ZEGOMONOKO. (17)

Having obtained this result, be it a name or a title, we must now try to find, in that period (middle of the 6th century) and in the East Iranian region, the historical figure that can be identified with the text of our reading. At this point I recalled that Drouin, in a paper once fundamental and even today very interesting, (18) quotes a Chinese source which mentions as ruler of the Western Turks between the years 753 and 572 the second son of Touman, one Sse-kin called Mo-han-khan (I reproduce Drouin's French spelling). A priori, I entertained no doubt that this Sse-kin-mo-han-khan is the Ze-go-mo-no-ko whom I found on the coins. However, in order not to go astray in linguistic matters when trying to recognize the Sse-kin-mo-han-khan of the Chinese sources in my Zegomonoko, I approached my colleague Dr. Zürcher of the Sinological Institute of the University of Leyden (19) who had already supplied the Kaniṣka conference in London 1961 with quite good translations and interpretations of the relevant Chinese sources. I requested him to find out the Chinese source and to control the possibility of my identification on the original texts. With his authorization, for which and for his disinterested helpfulness I am deeply grateful, I utilize here his information, somewhat abridged but without changes: (20)

« The names (or titles?) of the Turkish Qaghan you mentioned occur in various Chinese sources, the most important of which are the *Pei-shih* (completed 659 A.D.) and the practically identical account of the *Chou-shu* (completed ca. 629), in the sections which both historical compilations devote to the T'u-chüeh or Eastern Turks (*Chou-shu* ch. 50, *Pei-shih* ch. 99).

You mention the name in a French transcription; the normal English transcription would be Szu-chin for Sse-kin, Mu-han for Mo-han, and K'o-han for Khan (or rather Qaghan). Both transcriptions of course reflect the modern northern Chinese pronounciation. As to the Ancient 6th century) pronounciation, this would be according to B. Karlgren's reconstruction:

*dẓ'i kiə̯n muk ɣân k'â ɣân
corresponding fairly well with your
ze go mo no ko

where only *no* for *γan* causes some difficulty. But at first sight I consider your identification as convincing, and as a brilliant trouvaille! »

Considering the spontaneousness of the first reading and its independence from a later linguistic interpretation (the approximation to the original is much greater than I could presuppose), it appears that no doubt can be entertained on its correctness. We have thus obtained the earliest extant numismatic evidence for a Khan of the Turks; of course it is rather a title than a name, because the very same Khan tried to strike coins himself under another name or title, but with little success, as I hope to prove in another paper. (21)

* * *

Now we can at last try to determine the historical setting, the meaning of the countermarks. Countermarks indicate first of all that the coins thus marked are allowed to circulate in a territory not legally their own with a visible approval of the state. The very fact that the manipulation is carried out shows that the circulation suffers of scarcity of minted metal, because otherwise this makeshift would not be resorted to. Only coins of a determined standard and weight are admitted. The Turks, being newcomers from the steppe, did not at first dispose of a sufficient technical apparatus, which could make possible a coinage of their own. When, somewhat later, they started a coinage, they must have taken over and utilized a Sasanian mint in the border region (Herat ?; it belonged for a long time to the Hephthalites, above all in the time of Xusrō I).

A threefold countermark is exceptional; normally they are struck only once. In our instance it never defaces the image of the ruler, and filling with its triple occurrence almost the whole of the broad rim, it gives on the whole as it were a new die. Since the majority of the population within the range of our coinage could certainly neither read nor write, the image of the ruler, his formal representation in full royal ornate, was of paramount importance. And yet in our case a new ruler is proclaimed with all possible clearness.

An important question is why we never meet with countermarked Hephthalite drachms. In my opinion only one answer is possible: since these are coins circulating in a conquered territory, whose rulers had been overthrown, the retention of the Hephthalite drachms in circulation represented no loss of prestige for the Turks. The case of the drachms of the Sasanians, independent and powerful (at least in the long run) neighbours, is different. To keep their unchanged drachms in circulation might have been felt as the recognition of a sort of suzerainty.

A second question is whether the countermarked coins represent a currency already found in circulation in the conquered territory, and thus war booty, or if they came in only after the victory over the Hephthalites. Here too it is possible to give a clear-cut reply: a survey of the Sasanian mints represented among the countermarked coins (eight or nine) shows that with the only exception of Merw (initials MR) they are all Western Iranian mints (22). If it were booty money, it ought to come from the local currency, in which the produce of the Eastern Iranian mints would of course dominate (23). Besides, photos and casts show that these coins are quite new and little worn. As far as we can see, there is no other solution but to take the countermarked drachms as part of a Sasanian cash payment to the Turks, which the latter in their own fashion incorporated into the currency of the conquered territories by countermarking.

A third question is the purpose of this cash payment. In the times of Pērōz large quantities of Sasanian drachms went as ransom to the Hephthalites (24). When the Hephthalites started their own coinage (25), the Sasanian drachm determined the shape of the image, the choice of the titles and the standard of the Hephthalite drachms.

There can be hardly question of a cash payment in the form of a tribute (even a concealed one) under Xusrō I, who apparently was able to contain the expansionism of the Turks after the Hephthalite war. On the other side, we know that negotiations took place for a partition of territories between the two victorious states after the smashing of the Hephthalite power (25). They had become immediate neighbours, at least at some points. I think it likely, indeed the only possible solution, that this payment of Sasanian money played the role of a cash compensation.

This is now the place to deal with a difficulty, to which Professor L. Petech of the University of Rome kindly drew my attention.

Our Zegomonoko was according to the Chinese texts a ruler of the Eastern Turks, while Istemi ruled over the Western Turks. Now a countermarking in his name, instead of in the name of Istemi, is quite possible, because down to the death of the Eastern Turkish ruler T'o-po (573-581) the Eastern Turks held the title of Qaghan, while the Western Turks (Istemi and at first also his successor Tardu) had to be content with the subordinate title *yabghu*. It was only between 582 and 584 that the Western Turk Tardu took the title of Qaghan and rejected the suzerainty of the Eastern Turks.

Thus, this suzerainty was still existing at the time of the Hephthalite war, and it is quite possible that the countermarking was done in the name of Zegomonoko and not of Istemi. The whole procedure of overstrinking is indeed very short lived. It is a pity that in no instance, as far as I am aware, we know the finding spot of these peculiar types, which deprives us of an additional piece of evidence. On the other side, as I shall show in my forthcoming study on the Hephthalite coinage, Istemi started very soon a coinage of his own, which can be assessed as a sign of his relative autonomy. The Eastern Turks developed no own coinage.

Lastly, it seems necessary to point out that under a destruction of the Hephthalite power we have to understand just this, and not a disappearance of the Hephthalites from the stage of history. Generally speaking we know far too little of the real course of events. As shown by the coinage, petty Hephthalite chiefships survived the great disaster; they may have remained relatively independent, since they struck coins of their own. Thus it is better not to speak of a « fall of the Hephthalite kingdom », because even before that there was nothing but a more or less loose confederacy of autonomous Hephthalite states, of which too the coinage gives clear evidence.

Let us also state that, although our countermarks are not the first to be met with in this region, their employ grows very large just here in the following centuries. On the frontier between the high civilization of the sedentary peoples and the nomad cultures, makeshifts are necessary; and such are the countermarks. The systematic study of the countermarks shows itself in an increasing measure as an outstanding method of criticism of the sources.

Robert Göbl

NOTES

(1) For readers who are not specialised in numismatics, it seems advisable to stress the difference in meaning of two terms that are often confused. A countermark is a small symbol or legend applied on a coin for the purpose either of extending its period of circulation, or to indicate that it is allowed to circulate in a certain territory. This occurs very often. Quite another thing is a re-struck coin, when a coin of an earlier type serves as material for a new one.

(2) See n. 7.

(3) See n. 8.

(4) Quoted in H. Junker. *Die hephthalitischen Münzinschriften*, Berlin 1931, p. 657.

(5) De Morgan, *Manuel de numismatique orientale*, Paris 1923-1936, p. 457.

(6) H. Junker, Op. cit., p. 661.

(7) R. Ghirshman, *Les Chionites-Hephthalites*, Cairo 1948, pp. 15 seqq.

(8) O. Hansen in F. Altheim, *Aus Spätantike und Christentum*, 1951, pp. 81 f.

(9) H. Humbach, *Kušan und Hephthaliten*, in *Münchener Studien zur Sprachwissenschaft*, Beiheft C, München 1961, p. 34.

(10) In *Iranica Antiqua*, I (1962), pp. 93-116.

(11) I would like to express my best thanks to the Keepers of Coins in London (Dr. John Walker) and Berlin (Dr. Eberhard Erxleben) for having supplied me with all the casts of coins relating to this study. Abbreviations: B = Berlin; BM = British Museum. The numbers are those of the casts sent to me.

(12) Drawings seemed to be the only acceptable way for illustrating this study, because photographs in most cases give only a portion of the legend, and also often vary in clearness and intensity. In each case I took care to compare all the details and to control them as often as possible.

(13) Ap. Junker, Op. cit., p. 658.

(14) R. Ghirshman, Op. cit., p. 18.

(15) H. Humbach, Op. cit., p. 34.

(16) G. Widergren, *Xusrō Anōšurvān, les Hephthalites et les peuples turcs*, in *Orientalia Suecana* I (1952), p. 94.

(17) After the above lines were written, I had the possibility of a further study in the palaeography of the Greek-Bactrian cursive. Above all, I found new material in Kabul. In my opinion, it is not impossible that the sign which I took to represent *N* in Zegomonoko, could really be a *X* (chi) or a *H*; and thus we could also read Zegomoxoko or Zegomohoko, which would give a more exact equivalence with Szu-chin Mu-han K'o-han.

(18) E. Drouin, *Mémoire sur les Huns Ephthalites*, in *Muséon* 1895, p. 50.

(19) I would like to express here my heartfelt thanks to Dr. Zürcher for his invaluable help (letters of 8th May and 5th June, 1961).

(20) Letter of 8th May, 1961.

(21) To be published in my forthcoming work on the numismatic history of the Hephthalites.

(22) Cf. my article *Aufbau der* (sasanidischen) *Münzprägung*, in F. Altheim and R. Stiehl, *Ein asiatischer Staat*, 1951, ch. 2, especially the survey of mints on pp. 83 ff.

(23) In connection with the well-known fact that a hoard contains in every case mainly issues of the mints nearest to its site.

(24) R. Göbl, *Aufbau* etc. (see n. 22), p. 115.

(25) I.e. in the fourth century, beginning with types of Šāpūr II.

(26) G. Widengren, Op. cit., passim, especially p. 80.

In the Library

AESTHETICS AND POETRY: K. G. Pandey, *Comparative Aesthetics Vol. I, Indian Aesthetics*, p. 217 (Corrado Pensa) — A. J. Arberry, *The Romance of the Rubaiyat*, p. 218 (Pio Filippani-Ronconi).

ARCHAEOLOGY: John Marshall, *The Buddhist Art of Gandhāra. The Story of the Early School*, p. 219 (Donatella Mazzeo) — *Nizov'ya Amu-Dar'yi, Sarykamysh, Uzboy*, ed. by S. P. Tolstov, p. 221 (Alexander Sollohub) — *Tōkyō Daigaku Iraqu-Iran Iseki Chōsa-dan, Hōkoku-sho I*, by Namio Egami, p. 226; Krishna Deva, Vijayakanta Mishra, *Vaisali Excavations*: 1950, p. 227 (Adolfo Tamburello).

BIBLIOGRAPHY: Tung-li Yüan, *A Guide to Doctoral Dissertation by Chinese Students in America* 1905-1960, p. 229 (Lionello Lanciotti) — *Japanese Studies on Japan and the Far East*, prepared by Teng Ssu-yü, p. 229 (Adolfo Tamburello).

INDOLOGY: *The Gīlgit Manuscript of the Aṣṭādaśasāhasrikāprajñāpāramitā*, ed. and trasl. by E. Conze, p. 230 (Corrado Pensa) — Swami Prabhavananda, *The Spiritual Heritage of India*, p. 231; Harvey Day, *The Study and the Practice of Yoga*, p. 232 (Massimo Scaligero).

LINGUISTICS: *Mongolian-English Dictionary*, ed. by Ferdinand D. Lessing, p. 232 (L. Hambis) — Laurence C. Thompson and Nguyen duc Hiep, *A Vietnamese Reader*, p. 233 (Lionello Lanciotti).

NEAR EAST: H. E. Del Medico, *L'Enigma dei Manoscritti del Mar Morto*, p. 234 (Pio Filippani-Ronconi) — Jawad Boulos, *Les peuples et les civilisations du Proche Orient*, p. 235 (Massimo Scaligero).

PREHISTORY AND PROTOHISTORY: *Mogilnik Bronzovovo Vieka Kokcha* 3, ed. by S. P. Tolstov, p. 236 (Alexander Sollohub).

SINOLOGY: Yang Lien-sheng, *Studies in Chinese Institutional History*, p. 240; Tung Tso-pin, *Chronological Tables of Chinese History*, p. 240; Martin Piasek, *Fabeln des Chinesischen Altertums in moderner Sprache zusammengestellt* von, p. 240; Martin Piasek, *Chinesisch-Deutsches Wörterbuch*, p. 240; Luciano Dalsecco, *Elementi di cinese moderno*, p. 241; Lao Tse, *Tao Te King. Introduct., traduct., glose, comment et notes* par Jacques Lionnet, p. 241; Belpaire Bruno, *Le poète chinois Lo Pin-wang*, p. 242 (Lionello Lanciotti) — *Monumenta Serindica*, III and IV volumes, p. 242; Akigoro Taga, *Shūfo no Kenkyū*, p. 249 (Romano Vulpitta).

TAGORE: *Tagore Centenary Volume*, ed. by Mahendra Kularestha, p. 250; Rameshwar Gupta, *The Essential Tagore*, p. 251; *Rabindranath Tagore, A Centenary Volume*, ed. by S. Radhakrishna, p. 251 (Massimo Scaligero).

AESTHETICS AND POETRY

K. G. Pandey, *Comparative Aesthetics Vol. I. Indian Aesthetics*. Second edition. (Varanasi, The Chowkhamba Sanskrit Series Office, 1959, pp. XL + 756).

This second edition of Pandey's well known work appears enriched by a good 106 additional pages, as compared to the first edition. In fact, the Author has thought it desirable to broaden the field of his researches so as to include music and architecture; these arts had not been dealt with in his previous study which was devoted to what, according to the traditional Indian hierarchy of aesthetic values, are considered the highest forms of artistic expression, that is, drama and poetry.

The new material is distributed as follows: Chapter XI, Art of Music, pp. 511-555 (this is presented as a rapid and lively historical survey, from the Sāmaveda to our own time through texts, schools, innovations, etc.); Chapter XII, Philosophy of Music, pp. 512-578; Chapter XIII, Art of Architecture, pp. 579-616. This last chapter is in two parts: the first, primarily historical in nature, is devoted to a summary of the texts and schools concerned with architecture, while the second examines the aesthetic speculation which has arisen with regard to this art. As for the chapter on the philosophy of music, we know that Pandey is one of the few real connoisseurs of Shivaism and, particularly, of the Kashmir speculative movements (in this regard we may recall his volume: *Abhinavagupta, an Historical and Philosophical Study*, Benares 1935); therefore its great interest, in itself nature in such a subject, is further increased by virtue of the Author's special competence.

With respect to the nature of the aesthetic pleasure aroused by music and the metaphysical significance of the different notes, Pandey's chief source is the *Tantrāloka* by Abhinavagupta. As with the other arts, so in the case of music too, in the moment of hearing it there is created a non-pragmatic, and therefore exceptional, relationship in regard to the object; a relationship which is responsible for the aesthetic emotion: « when the object is viewed without any objective purpose, when the perceiving subject is free from all elements of individuality, when object is reflected on deindividualized self, it is not experienced as either pleasant or painful, but simply produces a stir in the universalized self of the percipient » (p. 562).

Then, to understand the final meaning of the musical notes, and to establish their position within the ambience of the complex Shaiva metaphysics, Abhinavagupta turns to, and exploits, so to speak, the famous theory of the *Paranāda*. The *Paranāda* is the unmanifest state of the perfect unity of sounds; it is manifested, until the fully completed phenomenalization is achieved, through three successive grades called, respectively, *Paśyantī*, *Madhyamā* and *Vaikharī*. Now then, musical notes are nothing but a special form (the gross one, *sthūla*) of *Paśyantī;* and as the latter represents a first concretization, so to speak, of the *Paranāda*, the notes too end by falling, in the final analysis, within the *Paranāda*, a sort of hypostasis of the Absolute and also termed, therefore, *Nāda-Brahma* or *Śabda -Brahma*. The school of dualistic Shivaism, as the author demonstrates, also conforms, except for some formal differences, to the same metaphysical concept.

As for Yoga, here too music occupies an outstanding position. Contrary to the forementioned movements, however, the Yoga schools instead of conducting inquiries on music as such, use it, rather, practically. They hold, in fact, that, among the objects of meditation music turns out to be one of the most satisfying, as the one which more readily and easily than others is in a position to lead the mystic to liberation.

It is legitimate to refer the art of architecture (*Vāstukalā*) too, according to various texts back to a supreme unifying principle, so that, in keeping with the *Nāda-Brahma* (music) and the *Rasa-Brahma* (drama and poetry), we likewise have the *Vāstu-Brahma*. Hence, « if we admit them (i.e. these three hypostases) to be the grades of concretisation or grossification of the absolute, we will have Philosophy of Fine Art with three primary categories and the Absolute at the top » (p. 615).

This inquiry by Pandey, which we have briefly summarized above, adds further to the novelty and interest we have indicated yet another fundamental virtue: clarity, which is present to the highest degree throughout the work, as well as in every page and every line of the whole.

Corrado Pensa

A. J. Arberry, *The Romance of the Rubaiyat* (London, 1959, pp. 244).

The centennial anniversary of the first edition of FitzGerald's well-known translation of the Rubaᶜiyāt by ᶜOmar Khayyām gives A. J. Arberry the opportunity of publishing a new critical edition of that work: a careful reconstruction of both every circumstance which led FitzGerald to create such a masterpiece in the English literature, and the various stages through which the work came to light.

No higher homage could probably be paid to FitzGerald's memory, and no one could have paid it better than such a qualified personality as Arberry who devoted profound studies to the exegesis of the poet and astronomer from Nīshāpūr. Arberry's studies, indeed, are well known to the students of Iran all over the world.

Arberry's preliminary essay gives us a vivid picture of FitzGerald's human and scientific personality: we go through the studies he carried out on Persian letters under the assistance of his master and friend Edward Cowell, and we realize his careful and hard preparation of the masterly translation which only a superficial reader could regard as drawn up in a state of ecstatic inspiration. But he would be wide of the mark as FitzGerald himself proves by the letters he wrote to friends and publishers to state his doubts and to disclose his divinations. Looking through such an interesting volume we plunge into the spirit of an age which was led away from us by the chaotic events in the last half century rather by the past years. We can also follow the thought of one of its highest representatives, and contemplate the creation of a work which, under the seat of genius, was destined to join two worlds — Persia and West — as well as two historically distant ages.

As a comment on such a deserving work it is to be wished that someone in Italy will re-member and commemorate Shāhnāmé's translation by Pizzi before long: a remarkable work both in the Orientalism and in the Italian literature, not to say of the greatest Indian poems' translations by Gorresio and Kerbaker.

Apart from the intrinsic value it represents as a scientific contribution, this homage Arberry has paid to his remote predecessor makes us realize how indebted we are to those who paved the way to the Oriental studies.

Pio Filippani-Ronconi

⁂

ARCHAEOLOGY

John Marshall, *The Buddhist Art of Gandhāra - The Story of the Early School: Its Birth, Growth and Decline.* (Memoirs of the Department of Archaeology in Pakistan, Vol. I, Cambridge, 1960; pp. XVIII + 118, plates 111).

In this book Sir John Marshall wants to « sum up » many years of research: through juxtaposition of the most significant sculptures he has attempted to outline a history of the art of Gandhāra and to establish its chronology. The task appeared a truly arduous one, both for the lack of scientific excavations in the past and for the scarcity of dated works (as well as the difficulty of interpreting dates where they existed). Of these dated works, however, Sir J. Marshall has dealt with one only, the relief of Mamāṇe Dheṛī (which he dates at 220 A.D., accepting 140 as the beginning of the Kaniṣka era).

The author himself, in his preface, states that this work must be considered « as no more than a pioneer effort »: declining health and failing eyesight have prevented him from carrying out more accurate researches on, for example, the qualities of the stone used and the localization of the quarries. Also « the decorative patterns and other architectural features, as well the fashions prevailing among celestials and mortals, need be set out period by period. And these things cannot be done until the sculptures in the museums have been classified and catalogued afresh and photographs in much larger number made available for study » (p. XVI).

The data brought by the stratigraphy of Taxila are extremely useful in regard to the pre-Kuṣāṇa phases (Śaka and Parthian art). The Author examines some of the toilet-trays found in the Sirkap city at Taxila, and notes some common features in those found in the Śaka layers: stiff figures, wide-open staring eyes, « wig-like » treatment of the hair), side by side with Hellenistic elements which he considers a heritage of the Greco-Bactrians, heritage which was gradually fading out. A vigorous revival coinciding with a new influx of western influence, but, this time felt in an original and lively way, is evidenced by the pieces discovered in the Parthian layers (the Author deals here also with stūpa-brackets or *nāgadanta*, discovered in Sirkap and in the Dharmarājikā stūpa at Taxila). To illustrate this Hellenistic revival in Parthian art, sir Marshall describes some stucco heads found in the Absidal Temple at Taxila, which he dates between about 30 and 60 A.D. (this use of stucco for figural work at such an early period is quite exceptional).

Then from Taxila he turns to the consideration of the very Gandhāra. He places the reliefs (all described in painstaking detail) on a parabolic line, according to the old positivistic doctrine of evolution of art, which he accepts wholly. (See ,for instance, pp. 22-23: « Although the design and technique are more advanced then in the preceding specimens, the eyes are still unduly wide-open and large... » or, on p. 45: « We cannot fail to be conscious of the incipient signs of failing technical skill visible in this relief... »). He divides this parabolic line in sections which he calls, respectively, Childhood, Adolescence, Maturity of the art of Gandhāra. « The story of the School's development resolved itself into three main chapters: its infancy under the Śakas; its childhood and early adolescence under the Parthians; and its later adolescence and maturity under the Kushāns ». He points out, however, that these sections are not to be considered as watertight compartments and that the lines of demarcation between them are exposed to be shifted.

In the Adolescent period «the sculptor still expressed himself in a Greek idiom... But he is now moving in a new atmosphere, the religious atmosphere of Buddhism... » (p. 43). Here the support of the Taxila stratigraphy is lacking: the criteria of date are almost exclusively based on stylistic and iconographic features. We may list some of them here: according to Sir Marshall's statements, the Corinthian pillars framing the reliefs are, in the first stages of the School, of the type « with a rounded shaft in a countersunk panel »; afterwards the pillar with a flat shaft predominates; the type of the « winged angel » appears only in the earliest stages; in the same phases we frequently find also the deva with drooping moustache (one of them, shown on a relief from Loriyān Tangai, offers the opportunity of a comparison (p. 46) with a deva from the Dharmarājikā), which lasts as far as the Mature period to be afterwards substituted by the type with youthful face, beardless and smiling; Vaijrapāṇi shows a similar variation: « from the middle of the 2nd century A.D. » the beardless type prevails over the bearded one; his face is set in the expression of serene sweetness so often portrayed in the reliefs of the Mature period (even in scenes which, like the Parinirvāṇa, would require the expression of pain and sorrow: see the sampling of Parinirvāṇa scenes on p. 98).

Another important element is the treatment of drapery (considered in detail on p. 74).

In the presence of śala trees not called for by any narrative requirements, in the presence of a heavy canopy of pipal leaves over the head of the Buddha, the Author sees representational habits, which appear in the period of so-called « Late Adolescence » and persist in the reliefs of the period of Maturity.

Sir John Marshall gives a clear definition of what he means by maturity: « Gandhāra art reached its maturity only when it had evolved a distinctive style and character of its own, and when its sculptors had developed their technical skill and powers of imagination sufficiently to give worthy expression to the traditions and ideals of Buddhism » (p. 63).

In considering the works of the period of Maturity, the Author does not overlook some important features: the multiplicity of the « ateliers », each with its own stylistic and iconographic traditions; the religious conservatism; the growing demand which inevitably leads to handicrafts products. This growing demand was accompanied by the use of the phyllite, which, according to the A. (p. 65), appeared no earlier than the 2nd century, firstly side by side with the other kinds of stone; afterwards it substituted them completely.

An outstanding trait of the period of Maturity, according to Sir J. Marshall, is the influence of the Indian element. (One of the introductory chapters has been devoted to the Early Indian School, so as to point out its basic characteristic and have them recognized as they occur). This influence appears chiefly in the arrangement of the figures, in the abundance and minuteness of the details (refinement in the portrayal of faces or of plant elements), and, finally, in the predominance of the architectural element (present from the very beginning in the works of Gandhāra, but not in such an overwhelming extent), even though unconnected with any narrative requirements and therefore used for purely decorative purposes. « This instinctive feeling for the decorative which is the hall-mark of Indian art at all ages becomes increasingly apparent in the art of Gandhāra in the latter part of the second century A.D., and there can be little doubt that this spread of Indian influence resulted from the closer contacts between India and Gandhāra after the extension of Kushān rule over Central India and Hindustān » (p. 93). Nevertheless, this imitation is limited to external elements: « the sculptors of Gandhāra... could not absorb the innate genius of the Indian for the decorative, and so, in the long run, Indian influence led to little more than the display of multiple figures in formal, sometimes geometric, array... » (p. 94).

At this point it would be well to point out that the author divides the period of Maturity into two parts: « ...the sculpture of the Mature period falls naturally into two groups or phases, namely, an earlier phase in which the sculptor's work unmistakably reflects his personal taste and imagination, and a later phase in which the sculptor makes perfection of technique his principal aim... According to my calculations, the first of these phases lasted for a few decades only, from the close of the first century until about A.D. 140; the second from that date until the break-up of the Kushān Empire three generations later » (p. 67).

The Later Maturity Period is dealt with in two separate chapters: one is devoted to narrative reliefs, the other to decorative statues and reliefs. In regard to the dating of the statues, the comparison between two images of the Buddha is interesting: one, from the Dharmarājikā, is assigned to the Early Maturity Period, the other to the Later Maturity Period: « ...whereas the Buddha in fig. 111 is wearing a moustache and has his eyes open and his hair taken back from the forehead over the ushṇīsha, in fig. 131 he has no moustache, the eyes are half-closed and the hair is dressed in tight little ringlets. Apart, too, from these significant features, there is a notable difference in the general style of the two statues, that of fig. 111 being free and unconstrained...; while that of fig. 131 is tight, laboured and self-conscious... Should any doubt still exist as to the age of this image, it is completely set at rest by the figural relief adorning its base. Such figural reliefs on pedestals of statues did not come into fashion until the middle of the second century A.D., and to judge by its style this particular relief can hardly be earlier than the last quarter of that century » (p. 100).

As we can see, despite the absence of criteria of date which might afford a solid support (those set forth above maintain a considerable margin of subjectivity: there is a need for further investigations and confirmations here), Sir J. Marshall does not refrain from setting dates. We may note a tendency to simplify the historical background: this is precisely what is missing in the work, the up-to-date historical information. The Author intentionally overlooks the most recent works on the subject which have led to considerable changes in the way of looking at the problems of the art of Gandhāra.

At the end of the volume, we find a comparison between the phase of stone production and that of production in stucco, which Sir J. Marshall considers sharply divided (indeed, he specifies that he has used the name of Later Gandhāra School for the second phase « in deference to some of *his* critics », but he still considers that of Indo-Afghan School preferable in some respects. A rapid examination of the fundamental differences between the two schools — which is afterward concretely illustrated in the description and analysis of one of the most widespread images of the period, the Bodhisattva — the following value judgement appears: « But, though the new clay or stucco technique was productive of a vast amount of indifferent, careless and unimaginative work, it also lent itself, in the hands of the more gifted artists, to work of a higher order than anything of which the Earlier School had shown itself capable — work which was remarkable for its command of form and vitality of expression, coupled in some cases with a spirituality which anticipated the best efforts of the Gupta Age in India » (p. 111).

The end of production in stone is set in the first half of the third century A.D., and the beginning of production in stucco in the second half of the fourth century, dates which had already been put forward in *Taxila*, which we do not agree with, considering the first to be too early and the second too late (See Mario Bussagli, « Gandhāra », in *Enciclopedia Universale dell'arte*, V, col. 637). The author concludes in hoping that archeological researches may be carried out in Bactriana, researches which might fill in a large gap and provide those links between the two Schools which have not been found in the Panjāb nor the North-West Frontier, nor, probably, will they be found in Pakistan.

Unfortunately, Sir John Marshall's death prevented him from carrying out his plan of writing a work on the Later Gandhāra School, particularly pretious on account of his love on this subject. He did not even manage to go over the proofs of the present book, which was seen through the press by M. Raoul Curiel and by Professor J. E. van Lohuizen.

Donatella Mazzeo

Nizov'ya Amu-Dar'yi, Sarykamysh, Uzboy. (The delta of Amu Darya and its lands, Sarykamysh, Uzboy). The history of its formation and settling. (Academy of Science of the USSR. Materials of the Khoresm expedition compiled and edited by S. P. Tolstov. Moscow 1960, pp. 346).

The present volume is the result of researches carried out between 1950 and 1956 in the delta of Amu Darya, in Sarykamysh and Uzboy by S. P. Tolstov, A. S. Kes, M. A. Itina, B. V. Andrianov, T. A. Zhdanko, O. A. Vishnevskaya, N. N. Vakturskaya, L. M. Levin, S. A. Trudnovskaya, E. A. Davidovitch. They are the authors of this monograph containing 22 maps, 89 drawings, 104 photographs.

The problem of the ancient course of Amu Darya and of the development of its population in the surrounding territories, has attracted since very early times, the attention of historians and geographers. Herodotus mentions Amu Darya twice, although each time under different names, and writes that one of its arms flows into the Caspian Sea. Historians of the campaigns of Alexander the

Great mention it very often calling it by the name of Ox. Strabo writes of the lower Amu Darya as of a big navigable river flowing into the Girkanian Sea, which leads us to suppose that Uzboy existed as a river at the end of the 4th century B.C. Uzboy, as a river, is also mentioned by the Romans Varron and Plinius. On the other hand, Polibius (204-122 B.C.), gives a different picture of Uzboy whiche is much nearer to its present state, i.e. a system of long lakes separated from each other by stretches of dry land. The late-Latin historian Ammianus Marcellinus (4th century A.D.) writes that both Amu Darya and Syr Darya flow into the Sea of Aral.

As a rule, all the authors of the Hellenic and Roman periods had a very vague idea as to where actually Amu Darya flowed, and gradually evolved a very mistaken idea about the Caspian Sea.

Writings by Arab authors are often just as vague and contradictory, especially those belonging to the earlier period. Thus for instance, Ibn-Ruste, a writer of the 10th century, gives a detailed description of the course of Amu Darya which according to him flowed at that time into the Sea of Aral, whereas his contemporary Al-Masudi writes that big rivers flow from the Sea of Aral into the Caspian Sea, one of them being Amu Darya. He obviously tries to make agree both the contemporary and the traditional notions.

The great Khoresmian scientist Al Biruni, writes in 1025 on the same subject and proves to have fairly clear ideas on the migrations of Amu Darya and the formation of its delta. He supposes that in ancient times the river flowed towards the west into the Caspian Sea and later changed its course towards the north, passing through Duldul-Atlagan, turning towards the east following the present dry bed of Akcha Darya towards Sarykamysh, and finally ending in the Sea of Aral. Al Biruni's statements agree in the main outlines with the conclusions arrived at by contemporary investigators.

Information on the course of Amu Darya during the Middle Ages is still very contradictory for some Arab authors write that it flowed into the Sea of Aral, whereas others continued to assert that it flowed into the Caspian Sea. However, it should be remembered that at the beginning of the 13th century Khoresm was conquered by the Mongols who destroyed many dams as well as the irrigation system, which caused the flooding of part of the country. This controversy about the ancient beds of Amu Darya and its flowing or not into the Caspian Sea continued right into the 20th century.

The huge areas of Kara Kum which stretch from the Sea of Aral to Kopet Daga and from Amu Darya to the Caspian Sea contain numerous tracks of ancient river beds and deltas as well as of long lakes. The relief of the country and various sediments deposited during many centuries show that Amu Darya has changed its course many times, sometimes flowing into the Caspian and sometimes into the Aral seas. The history of Amu Darya can be divided into two periods: the prehistoric age which includes the early quaternary period, and the late quaternary and modern periods. During this latter period three different deltas of the river were formed: the Akcha Darya, the Sarykamysh and the Aral deltas. At first the waters flowed partly into the lake of Khoresm and partly into the Aral depression contributing to the formation of the sea whereas the lake gradually disappeared. Later, during the Sarykamysh period the waters flowed into the Sarykamysh depression, and on reaching a certain level moved in south westernly direction forming the Uzboy valley which continued to develop as it advanced towards the west following the receding Caspian Sea. The lakes in the valley gradually disappeared, and a river — sometimes encased by canyons and fast flowing, sometimes wide and slow — comes into being.

Researches established the existence in the Uzboy valley of two neolithic cultures: the lower Uzboy culture connected with Iran and Transcaucasia, and upper Uzboy culture which is a veriety of the Kelteminar culture of Khoresm which in its turn is related to the neolithe and eneolithe of western Kazakhstan, of the Urals and of Kama. Towards the end of the 3rd and the beginning of the 2nd millenium B.C. the lower Uzboy tribes are being assimilated by the upper Uzboy tribes, and during the bronze age Tazabag'yab tribes spread along the river up to the delta of Uzboy. Neolithic settlements along the course of the river are numerous whereas neolithic and bronze age settlements are more scarce especially along the upper course, thus proving that it was gradually drying out. During the 6th century B.C.-4th century A.D. no new settlements seem to have been established as no traces have been found except for some Scythe arrow points. Regular trade routes through the Uzboy begin only in the 10th century.

Numerous neolithic settlements are also found in the southern delta of Akcha Darya. One of them — Dzhanbas 4, dating back back to the 4th and the 3rd millenium B.C. is the best example of Kelteminar culture yet known. It was a settlement of hunters and fishermen.

The third stage in Amu Darya's history begins the gradual formation of the Aral delta and the drying out of Sarykamysh which is partly due to irrigation. The main irrigation canals which date back to the 1st millenium B.C. are huge, sometimes 35-40 meters wide, but they are relatively not very deep. They run along the more recent courses of the ancient beds of Amu Darya's delta near the « takyr » (cracked clay soil) plain. During the Kushan period (2nd-3rd centuries A.D.) the structure of the irrigation system changes approaching the mediaeval type. As a rule the main canals are based on the waters of the then existing delta of Amu Darya and reach a substantial length whereas the width decreases, being reduced to 15-20 meters. The irrigation network of the Ancient period covers nearly the whole territory of the Sarykamysh and of southern Akcha Darya deltas of Amu Darya, and ancient fortresses stand on the lower water courses of the right river bank. The destruction of the dams by the Mongols, the flight and captivity of the population, brought about the flow of the waters along all the ancient beds into Sarykamysh. It is known that Khoresm recovered fairly rapidly after this calamity, and in the second half of the 13th century and in the 14th century new irrigation systems based on Daryalyk and Daudane were created. Repeated incursions by Timur into Khoresm resulted in a new and greater breaking through of the waters of Amu Darya into Sarykamysh at the end of the 14th century, where a lake, in some places 90 meters deep was formed. As a result of this, the level of the sea of Aral fell and its waters became very salty.

AKCHA DARYA.

The delta of Akcha Darya lies to the right of Amu Darya and spreads from the north and north east of the town of Turtkul, crosses Kyzyl-Kum and reaches the sea of Aral. It is divided into two deltas, the southern and the northern, and is a plain of alluvian sediments with an even clay « takyr » or sandy surface. This plain is intersected by numerous dried out river beds. Prehistoric settlements are not to be found along the important river beds which proves that primitive man was afraid of big rivers with their constant threat of erosion and floods. The earliest traces of habitation discovered in the district belong to the neolithic period and can be date end of the 4th-beginning of the 3rd millenium B.C. These are numerous settlements of primitive hunters and fishermen belonging to the so-called Kelteminar culture. Kelteminar settlements Dzhanbas 4, 5, 11, 12, in the region of Dzhanbas-kala fortress lie at a certain distance from the main river bank. The settlement Dzhanbas 4 is a classical example of early Kelteminar. Remnants of a vast dwelling were discovered there. It was built of timber and reeds and was destroyed by fire and subsequently flooded. It is egg shaped, measuring 26 × 17 meters and had a conical roof probably 8 to 10 meters high in the centre above the hearth. It was probably built by one big family or clan formed of separate individual families (couples) numbering some 100 to 120 people in all. The tools were mainly of flint although some were also made of bone and the ornaments out of sea shells. The pottery is extremely varied both in shape, decoration and technique, typical for Kelteminar culture, and has a red or yellow ochre surface. Similar material has also been found in a number of settlements scattered over a wide area around the delta, such as for example, the settlement Kunyak 1. The settlements in the region of the well Tadzhikazgan, which were discovered in 1955, are also very interesting.

New tribes, belonging to the Suyargan culture make their appearance in the southern Akcha Darya delta towards the end of the 3rd beginning of the 2nd millenium B.C. and spread over the whole area. Numerous settlements belonging to this culture which lasted until the 1st millennium B.C. were found in the regions of the southern and northern deltas of Akcha Darya. Among the remnants of this culture, pottery occupies an important place and is made of a mixture of clay, pebbles and crushed shells and in many cases is painted in red.

A great number of settlements belonging to the bronze age were found in the southern delta of Akcha Darya and date back to the second half of the 2nd millenium B.C. Some of them belong to the Suyargan culture whereas others to a new ethnical element — the Tazabag'yab culture. They spread over a vast area of the southern delta. To this culture belongs the archeologically very important burial ground of Kokcha 3 which was discovered and excavated in 1954-55. Tazabag'yab settlements were also found in the neighborhood of the northern delta, but in this region they have not as a rule, a direct contact with river beds and lie on slopes of sandy dunes situated in the centre of the delta. Moreover, the archeological material which was found there is slightly different from that of the southern delta, although fundamentally it belongs to the same two cultures — the Suyargan and the Tazabag'yab.

The gradual drying out of the Akcha Darya delta was an incentive for the development of a primitive system of irrigation based on some of these courses across which dams were erected.

The 9th-8th centuries B.C., i.e. the eve of the rise of slavery in Khoresm, witness the spreading of a new culture — the Amirabad culture — which continues the late Suyargan culture with an addition of some Eastern elements. The tribes which belonged to this culture developed irrigation still more by digging a series of parallely running canals issuing from the lateral river beds which were intersected by dams. In the 7th-6th centuries B.C. important social and economic changes occured: slavery was introduced and with it the creation of a vast system of irrigation made possible thanks to these new conditions which permitted the concentration of the necessary man power. The rise of the feudal system in the 5th-8th centuries, the disappearance of slavery, the invasions by Huns-Eutalites and of the Turks were harmful to irrigation and the majority of the great canals fell into decay and were abandoned. Finally, Mongolian invasions destroyed the agricultural oasis of the right bank, and the entire irrigation system of southern Akcha Darya delta falls into decay right up to the 19th century.

The Sarykamysh Delta of Amu Darya.

This ancient upper quanternary delta of Amu Darya is a flat alluvial plain of sand and clay lying between the lower Amu Darya and the Sarykamysh depression. It is intersected by numerous river beds various in form and size. Many among them, such as Daryalyk and Daudan are very well noticeable as they are deep and wide. Smaller river beds branch off from the main course and can be followed for many kilometers, and the nearer they approach to Sarykamysh the less visible they become. The depth of these river beds varies from a few metres to 40-60 metres. In the alluvial sediments of ancient Amu Darya, especially along its upper course, carbonized remnants of reeds, roots, etc. are to be found.

Archeological data show that the settlements of the delta date back to the neolithic period and that the upper Azboy neolithic culture — one of the varieties of the Kelteminar culture — was widespread. Moreover, this culture seems to have a certain local or chronological character connected with lake Surykamysh. The settlements of Gyaur 1 and of Khatyb seem to belong to the time when one of the southern arms of the Sarykamysh delta — Tuny Darya — still existed. Gyaur 1 is one of the largest settlements on the left bank of Amu Darya. It lies on the very bank of the river at the foot of a sandy dune. Many objects have been found there as well as in the settlements Khatyb 1 and Khatyb 2. The flint tools found at Khatyb 1 and Gyaur 1 have many features in common. This, as well as the closeness of these settlements to purely Kelteminar settlements lead to the conclusion that the northern route was probably one of those used by ancient Kelteminar tribes for settling down in Uzboy. The bronze age is but poorly represented and only few settlements of that period have been discovered. The so-called « barbarian » pottery belonging to nomad cattle breeders and dating back to the first half of the first millennium B.C. (7th-4th centuries B.C.) has been found everywhere in the Sarykamysh delta which at that time still had much water and many meadows. No remnants of bronze and iron age irrigation have been discovered up to now, but the ancient (7th c. B.C. - 5th c. A.D.) Khoresmian system is exceedingly well represented and many traces of settlements of that period have been found. The flooding of the Sarykamysh delta and the flow of Amu Darya's waters along Daryalyk, Daudan and other river beds after the campaign of Timur brought about the formation of a big lake at Sarykamysh and the abandoning of vast territories. Agriculture gave way to cattle breeding except for the Daryalyk oasis, where Vazir its main center, served as capital and residence to the Khans of Khoresm during the 15th-16th centuries.

SARYKAMYSH.

The Sarykamysh depression which lies some 200 kilometers southeast of the of the Aral sea is one of the largest depressions of Central Asia. It is oval in shape and measures 150 kilometers from North to South and 90 from west to east. Its lowest points are 40,5 meters below sea level. To the east of this depression lies the near-Sarykamysh delta of Amu Darya, 50 meters above sea level at Sarykamysh and 80 meters near the present day Amu Darya. South of Sarykamysh begins the Upper Uzboy corridor. The depression which starts at 50 meters above sea level is not very different from the surrounding desert. Within its area lie sand dunes, vast salt deposits, deep cavities, flat clay plains with « takyr » (cracked clay desert soil) surface, etc. It is surrounded by a ring of pebbles, stones and shells. In many places the outlines of the shore are well marked.

The most ancient settlements on the shores of Sarykamysh as well as in the Upper Uzboy near the Charyshla well belong to the neolithic period and are to be found in the southern gulfs of the former lake — the gulfs of Charyinsk, Pishke-Kuin, Orta-Kuin. The more recent archeological discoveries belong mainly to the Middle Ages although some remnants of Khoresmian antique have been found near the western borders of the lands of ancient irrigation, that is, on the eastern limits of the depression. The earliest monument belonging to the Middle Ages is the fortress of Zenghi-baba. Today its walls are buried under pebbles and numerous shells and the whole forms a mound on the top of which lie chalk burial stones of a cemetery. The fortress is a rectangular building measuring 40 × 35 metres built of big flat chalk stones well polished on the outer side. It was part of the defensive system of Khoresm and dates back to the 12th beginning 13th century. To this period belongs also the greater part of the pottery which was found within its walls.

The mediaeval irrigation of Sarykamysh and of the surrounding country can be divided into 4 systems: the southern, the eastern and south eastern, the south western and the western. The archeological material discovered there, contains, apart from pottery, a great number of different rather primitive coins, mainly copper ones.

During the Middle Ages, after 1220, the Sarykamysh depression was filled with water as the result of the destruction of the dams by the Mongols. However, the rise of the water soon ceased thanks to the rapid reconstruction of the dams which prevented the flowing of the waters into the depression. In the seventies and eighties of the 14th century, as a result of five invasions by Timur, the last one, that of 1388 being the most destructive, when not only towns including Urgentch, the capital, but also many canals and dams were destroyed, Amu Darya resumed to flow again along the old beds into Sarykamysh. At the end of the 16th, beginning of the 17th centuries the flow of water into Sarykamysh decreased and the level of the water in the lake began to fall and grew more and more salty. The drying out of the lake followed the same pattern as its predecessor of the upper quaternary period.

THE RIVER BED OF UZBOY.

The valley of Uzboy is of great interest since it raises the problem of whether or not it is the bed of an ancient river. Recent discoveries and studies have have yielded useful data towards solving this problem. The history of Uzboy is that of a typical river valley which was formed by a powerful flow of water in a relatively short time during the upper quaternary age. Therefore it can be asserted that the river Uzboy really did exist and flowed out of the southern bay of the upper quarternary Sarykamysh lake and entirely depended upon it for its water supply. The lake in its turn depended upon the waters of Amu Darya.

Neolithic remnants in the Uzboy valley are much more numerous than those of the bronze age. Their settlements are scattered along the ancient river bed which is another proof of the existence of the river up to the beginning of the first millenium B.C. These settlements lay along a narrow strip of land near the water's edge. They lay from a few metres to a few dozen meters from the water except there where the valley widens and where it was sometimes flooded. The concentration of neolithic remnants, especially of flint tools, is so great that there were but few cases when researches made at any spot of the river bank were fruitless. It is interesting to note that pottery is practically absent, and this may be due to the fact that it probably did not resist the corroding action of the salt contained in the ground water. Neolithic settlements were also scattered over a vast area around the lakes which came into being as the result of floods. Two groups of cultures can be identified, the upper and the lower Uzboy cultures. Bronze age pottery discovered in some places proves the existence of Tzabag-yab culture in the second half of the 2nd millenium B.C.

Remnants of monuments and settlements belonging to the Antique age are not to be found along the Uzboy between Charyshla and Kelkor except for the fort of Igda-kasa in central Uzboy which belongs to the very end of this period. Conditions change once more during the Middle Ages when the nomadic population increases and caravan paths connecting Khoresm with southern Turkmenia and Iran are being trodden through. Big fortified caravan-sarys are built along some of these paths during the 9th-10th centuries. Water resumed flowing in the Uzboy valley for a short time between the end of the 14th and the beginning of the 15th centuries and only as a result of Timur's invasions.

ALEXANDER SOLLOHUB

Tōkyō Daigaku Iraku-Iran Iseki Chōsa-dan, Hōkoku-sho 1, Teru Sarasāto, 1, Daini-gō Oka no Hakkutsu, 1956-1957, Tōkyō Daigaku, Tōyō Bunka Kenkyū-sho, 1958. (The Tōkyō University Iraq-Iran Expedition, Report 1, *Telul Eth Thalathat, The Excavation of Tell II, 1956-1957*, by NAMIO EGAMI, volume I, The Institute for Oriental Culture, The University of Tōkyō, 1958; pp. 15 + 195 + 17 + VIII + 24, colour plates 6, black and white plates LXXXI, figures 72; in Japanese with brief contents in English).

The volume is in quarto, printed with great accuracy, profusely illustrated by drawings, photographs and maps. Dr. Namio Egami, Director of the Tōkyō University Iraq-Iran Expedition, assisted by the staff of expedition, publishes in it the first partial results of an important series of archaeological explorations carried out by Japanese scholars in Iraq, specifically at Telul eth Thalathat in the plain along the Tigris on the outskirts of Mosul.

This is the first time that members of the Japanese academic world have taken an active part in excavation works in the Mesopotamic region, where archaeologists from many countries had already worked for several years accumulating an amount of evidence on the prehistorical and protohistorical cultural developments of this region that was at the center of the most important stages in the progress of human civilization.

For several years already the Japanese archaeologists have been directly concerned with research works in the region of Western Asia. It is the general opinion that the earliest neolithic civilizations of Eastern Asia originated in the Near East and that several cultural and ethnical elements had come since early times to the Far East from the Western regions. It is thus very interesting for the scholars of Far Eastern archaeology to investigate in the area of the Near East the general problems regarding the origins and the early spread of agriculture and cattle-breeding, the earliest stages of village communities and the development of the most ancient historical civilizations.

For these reasons Japanese archaeological expeditions have been active in Iran, Afghanistan and Mesopotamia over the past several years and have also investigated the theory that the archipelago culture's ultimate origins will be found in the Near East. Important finds for both Japanese and particularly Iranian history have been uncovered and have showed that both countries have had close associations dating back some milleniums, to the dawn of Japanese historical development. Partial results of these researches have already been revealed by a group of Japanese scholars at the Fourth International Congress on Iranian Art and Archaeology held at New York University in 1960.

In 1953 some Japanese scholars, among them Dr. Namio Egami, accepted the invitation addressed by the then Director-General of Antiquities in Iraq, Dr. Naji al-Asil, to Prof. Fumio Tsunoda of the Ōsaka University to organize a Japanese archaeological expedition in Iraq. After the founding in 1954 of the Society for Near Eastern Studies in Japan, the project of this expedition was studied in all its details, and Dr. Namio Egami was sent to Iraq to visit some sites and to consult with Dr. Naji al-Asil about this first Japanese expedition. The choice of the excavation sites fell on some as yet unexcavated tell of Northern Mesopotamia. Among these sites there was Telul eth-Thalathat (Uch Tépé), near Mosul, which was selected for an intensive exploration.

The expedition was organized in 1956 by the Tōkyō University under the sponsorship of the Asahi Newspaper Company and other organizations. Dr. Namio Egami was appointed Director of the expedition.

The excavation works were quickly carried out in two seasons, in the autumn of 1956 and in the spring of 1957.

The prehistoric site known as Telul eth-Thalathat consists of four independent *tell*, grouped into one. It is situated in the vast plain along the Tigris, about sixty kilometers west of Mosul. For the first excavation was selected the *Tell II*, which was the lowest of all (8 metres high) and appeared to be the easiest to dig in the relatively short time available. The choice was also motived by the consideration that in this *tell* the oldest layers should be reached more quickly than in the other higher ones.

The works were carried on from the 8th of October to the 20th of December 1956 and from the 6th of March to the 26th of April 1957. Two trenches were dug along the diameters of the *tell* roughly in the shape of «T». Additional excavations were carried out along both sides of these two trenches in order to trace the plan of the settlement unearthed and to observe the stratification of cultural levels in the various parts of the *tell*. The works have brought to light Uruk period artifacts and building remains from the uppermost strata and Ubaid and pre-Ubaid period materials and relics from the lower strata. The finds included stone implements and tools (obsidian and flint blades and scrapers, polished stone axes, stoneware, pestles, pendants, beads, etc.); bone implements (awls, axe and spatulas); fragments of pottery (painted and unpainted ware, coffin-jars, sling-balls, spinning whorls, nail-shaped objects and figurines); architectural relics (brick and door sockets of stone); human skeletal remains; animal bones; shell and carbonized corn. The various strata containing materials from the middle Ubaid to the upper Uruk period were dated from a period ranging between 4000 and 3500 B. C. The excavations have also revealed that the site of the primitive village of the *tell* was utilized often as a burial place during the Bronze Age (the early Assyrian or the Hurrian periods). Burial pits and coffins have in fact been found which contained skeletal remains of that age often supplied with funerary furniture.

* * *

The volume under review provides the detailed archaeological report on the works of the first and the second seasons. The description of animal bones, grain and other remains found during these two seasons are not reported here, since it will be published in a forthcoming volume. This next volume will also include a report on the excavations carried out in the third season of the spring of 1959, which brought to light materials of the most ancient periods from the lowest strata of the *tell*. After these reports are written and published, and the excavations of the *Tell II* at Telul eth-Thalathat are completed, a comprehensive report will be prepared. This third volume will be written in English with an abstract in Japanese, according to the agreements of the Tōkyō University Iraq-Iran Expedition with the Directorate General of Antiquities in Iraq.

The present volume, written in Japanese but supplied with brief contents in English, is divided in several chapters: a general introduction; a report of the investigations of the site; a description of its natural environment; an explanation and study of the stratifications, structural remains and artifacts in the excavated areas divided into the various trenches; a series of observations of the architecture of the site; and finally an examination of the human skeletal remains uncovered in the burials.

East Test

The English part, though very brief and summary, includes, besides a foreword by Noboru Niida, a preface and a report of the excavation by Namio Egami, and a registration list of the archaeological specimens with the descriptions of the objects, their sizes, indications of the finding places and of the cities (Tōkyō or Baghdad) in whose museums they are preserved according to the agreements between the Tōkyō University and the Iraq Government. Also compiled in English are the lists of the plates and the figures. Also, the explanations of the single plates are written in Japanese and English.

The work thus meets the needs of scholars of Near East archaeology of all countries. The importance of the researches in question has been justly evaluated. There is no doubt that the entire work, when completed, will be one of the most valuable contributions to the archaeological study of the Mesopotamic region.

ADOLFO TAMBURELLO

KRISHNA DEVA, VIJAYAKANTA MISHRA, *Vaisali Excavations: 1950* (Vaiśālī Sangh, Vaisali, 1961; plates XXV, plans, sections and line drawing 24, pages 68).

Vaisali (Vaiśālī), now represented by Basārh and neighbouring villages located in the district of Muzaffarpur of North Bihar, is one of the most ancient cities of India, with a certain wealth of traditions and historical legends, many of them related to the history of Buddhism. The identification of modern Basarh, containing the Raja-Visal-ka-garh, with the fortified city of Vaisali has been readily permitted by the discovery of some seals engraved with the name of Vaisali.

The antiquity of the place attracted the attention and the interest of many scholars since the last century. The site was first noticed by J. Stephenson who visited it in 1834. Successively A. Cunningham visited it between 1862 and 1864 and described its antiquities. In 1903-1904 T. Bloch undertook the first excavations at the Garh of Raja Visala, unearthing numerous official Gupta seals which proved that the site was an ancient town of the Gupta empire. Afterwards, in 1913-1914, D. B. Spooner also carried out some excavations at the same Garh site and was able to ascertain that the occupation of the place dated back from the Gupta to the Maurya age.

The results of the first researches had already some years ago led the authorities of the Vaisali Sangh to organize further excavations at Vaisali, which were later undertaken by the Department of Archaeology of Central Circle of Patna in 1950 under the direction of Shri Krishna Deva.

The main aim of the new excavations was to determine the nature of the defences of the Garh site and to get broad evidence about the stratifications and cultural sequences of the place. The site looked like a large brick-covered mound about a mile in circumference. The average height of the ruins was some eight feet.

The excavation, carried out by the driving of four trenches in the Garh area and one other at the site of Chak Ramdas (the latter situated about a mile west of the Garh), revealed two phases of the defence-constructions: a first consisting of a mud-rampart measuring more than 65 feet wide and over 9 feet high, and a second represented by a sort of mud-brick structure. The evidence from all the dwelling sites revealed a succession divided into four periods. Period I (c. 500-150 B.C.) has been divided in two phases: *a* and *b*. Phase *a* (c. 500-300 B.C.), observed only in the site of Chak Ramdas, is characterized by the Northern Black Polished ware, black and red ware and red ware, associated with bone-points and some iron objects. The architectural structures of the period seem to have been of perishable material like mud and bamboo. Phase *b* (c. 300-150 B.C.), which marks the earliest occupational phase in the Garh area, yielded Northern Black Polished ware and grey ware, simple structures of square bricks; bone points and iron objects; beads of semi-precious stones and opaque glass; terracotta Naga and other figurines. Period II (150 B.C. to 100 A.D.) is characterized by well-planned single course structures of complete bricks. The period represented a phase of remarkable artistic activity on the site. Objects like steatite votive plaques with representations of the Mother Goddess, punch-marks and cast-coins, ear-ornaments, bangles and beads of pottery and shell, copper and iron objects were found in great number. Period III (c. 100-300 A.D.) is evidenced by structures of bricks laid on foundations of brick concrete. The associated finds were red ware, beads of carnelian and pottery. Period IV (c. 300-500) is finally characterized by structures of brick bats, Gupta terracottas and sealings inscribed in the Gupta Brahmi script.

The results of these excavations conducted in 1950 are abundantly illustrated in the report under review edited by K. Deva and V. Mishra. The volume, which opens with a preface by J. C. Mathur, is divided in five parts: the first of an introductory nature, the second on the chronological problems, the third devoted to the description of the cutting works, the fourth and fifth to the examination of the pottery and other finds. An appendix on the study of the animal remains concludes the report. The work has unfortunately been published with a delay of ten years, but this does not invalidate the value of this contribution. As is known, the results of these first excavations led to the carrying on of the research-works, which have been recently started by the K. P. Jayaswal Research Institute under the direction of Dr. A. S. Altekar and Shri Sita Ram Roy. In the issues 1957-58 and 1958-59 of *Indian Archaeology* there were notices on the results of the further excavations, which, with respect to those conducted at the ruins of the fort of Vaisali, nevertheless do not seem to substantially modify the previous acquisitions, although they add new important elements especially for connected chronological problems.

Adolfo Tamburello

BIBLIOGRAPHY

TUNG-LI YUAN, *A guide to doctoral dissertation by Chinese Students in America 1905-1960*, published under the auspices of the Sino-American Cultural Society, Inc. (Washington D.C., 1961, pp. XIX + 248).

This is another bibliography, thanks to the tireless work of the distinguished Chinese bibliographer Yüan Tung-li. It covers 2,789 doctoral dissertations by Chinese students in American universities during 55 years. It is, as well as a bibliography, a document of a cooperation in the cultural field between two different countries. If it also serves to document the preferences of the Chinese who take their doctorate degrees in various fields of knowledge at American universities, it is likewise a living testimony of how, among so many names, a few of primary importance to modern China have emerged: from Hu Shih, who obtained his Ph.D. at Columbia University in 1917, to two Nobel-prize physicists, Yang Chen-ning and Lee Tsung-dao (Li Tsung-tao).

The bibliography is divided into three parts: Humanities, Social and Behavioral Science (pp. 1-70), Physical, Biological, and Engineering Sciences (pp. 71-219), Canadian Dissertations, 1926-1960 (pp. 221-222). Two appendices follow: the first containing the list of honorary degrees granted between 1876-1961; the second containing statistical tables on the distribution of doctorates by Institution and Major Field of Study. The work is completed with a highly detailed index by field of study.

LIONELLO LANCIOTTI

Japanese Studies on Japan and the Far East - A short biographical and bibliographical Introduction. Prepared by Teng Ssu-yü with the collaboration of Masuda Kenji and Kaneda Hiromitsu (Hong Kong University Press, 1961; pp. X + 485).

This work constitutes a bibliographical inventory of Japanese studies on the Far East which brings together the data on over 5,000 works — books and articles in reviews — published by a group of more than 760 Japanese scholars in the period between 1942 and the present. For every author, in addition to a short list of his most important works, the basic biographical data are given: year of birth, academic degrees, specialization, scholarly activity.

The inventory is organized by sections: The Far East with its fields of studies; then Japan, China, Korea, Buddhism and India. Along with the general part on the Far East, China and Japan contain the largest number of items and are organized by subject: history, literature, linguistics, religions, philosophy, bibliography.

According to the author's intention, the inventory was compiled essentially to meet the needs of Western Orientalists for a better knowledge and a more accurate evaluation of the work of their Japanese colleagues, which would also serve the aims of a more intensive and desirable international scientific and scholarly collaboration.

In the introduction the author sets forth the criteria by which the work was compiled. The volume, he writes, « is only a very brief biographical and bibliographical introduction to a small part of the Japanese scholars engaged in the humanities. We should perhaps 'blame' Japan for having too many scholars who are so prolific; the titles which survived the deletion are essentially 'appetizers'. It is far, far from being a complete inclusion of their works, and it is not an authoritative selection of the numerous Japanese scholars. A number of internationally famous senior authorities are purposely omitted, partly because they are too old to be bothered by Western visitors, and partly because they no longer need any introduction. Deceased savants are excluded too, for they can neither co-operate with the Westerners nor serve as their consultants. During the time of compilation, several scholars were taken out of the file because of their recent death. May we pray for the longevity of all the scholars chosen herewith in the following pages; at least, for their living until the appearance of this book!...»

...The wish set a rather short time limit; may we, with the author's agreement, prolong it until the sale of the last copy of the book?

ADOLFO TAMBURELLO

INDOLOGY

The Gilgit Manuscript of the Aṣṭādaśasāhasrikāprajñāpāramitā. Chapters 55 to 70 corresponding to the 5th Abhisamaya. Edited and transl. by EDWARD CONZE (Roma, IsMEO 1962, pp. XXV + 390).

At it is well known among scholars of Buddhism, the three main texts of the *Prajñāpāramitā*, — the *Śatasāhasrikā*, *the Pañcaviṃśatisāhasrikā*, and the *Aṣṭādaśasāhasrikā* — are actually nothing but a single text (see, on this subject, E. Conze, *The Prajñāpāramitā Literature*, The Hague, 1960); indeed, they differ only as to quantity, according to the lesser or greater number of repetitions, *clichés*, mechanical additions, etc. It is therefore quite legitimate, by passing over such merely extrinsic differences, to refer to a single volume termed « The Large Prajñāpāramitā ». Of this text only a part, and this not the largest, has been published (P. Ghosha, ch. 1-2, 1902-1913; H. Dutt, Ist *abhisamaya*, 1934) and only recently a translation, which is also only a part (Ist *abhisamaya*), has appeared, made by Conze (*The Large Sūtra on Perfect Wisdom*, Part. I, London, 1961) which is wonderfully clear and, as usual, extremely accurate. Now, thanks to Conze's latest effort which we present here, the fifth *abhisamaya* can also be included in the sphere of our knowledge, needless to say to the enormous advantage of our understanding of the doctrine of the *prajñā* and of the schemes of the *Abhisamayālaṃkāra*. Indeed, it is obvious that the latter, representing as they do a synthesis, automatically become much clearer when we know the context which they sum up.

The critical edition, as we gather from the title itself, is based on 45 consecutive folio pages of the *Aṣṭādaśasāhasrikā* (containing the Vth *abhisamaya*) coming from Gilgit, found by Professor Tucci in Pakistan and loaned to IsMEO by the Archaeological Department of Pakistan. This manuscript has been compared with other documents (see pp. XIII and XIV) — a most of them rather incomplete — the most important of which is a second manuscript of New Delhi of the *Aṣṭādaśa*, which is fairly fragmentary but more exact than the published one; with regard to the gaps, the Author made use primarily of the Tibetan version and of the text of the *Śatasāhasrikā*. It goes without saying that this critical edition is all one could wish to have on the subject, even if Conze means to consider it only « to some extent a critical one », adding immediately afterward that « the final and definitive edition of these texts can only be expected from the collaboration of many scholars, organized by some learned institution, which may one day prepare an edition of the various versions of the large Prajñāpāramitā » (p. XX). Unfortunately, however, it seems to us that at present an active interest in the *prajñā* concerns only a few scholars and the time for such a desirable collaboration therefore still seems far off.

As to the translation, it contains countless virtues. First of all we perceive that the English text appears subdivided in the most organic and rational way possible: the Author, in fact, not content with the mere division into chapters found in the text, undertakes to introduce a further internal distinction, drawing, for this purpose, on the headings of the *Abhisamayālaṃkāra* (see the edition edited by Conze himself, S.O.R. VI, IsMEO, Rome, 1954): whence, thanks to these headings, the entire Vth *abhisamaya* falls under the title: « The full understanding and its summit » (in fact, the difficult subject of the Vth *abhisamaya* is represented by the series of problems correlated with the *upāyakauśalya*, « skill in means », peculiar to the late stages of the career of the bodhisattva) and its different sections are therefore called: « Its characteristics », « Their growth », « Firm position », « Complete stabilisation of thought », « The path of vision », « The path of development », « The unimpeded concentration », « The 16 errors ». These sections are in turn divided into numerous other sub-sections, always in keeping with the framework of the *Abhisamayālaṃkāra*. In addition, the various chapters are also each provided with a title, drawn from the colophons of the Tibetan version. Anyone who is in the least familiar with the Prajñāpāramitā, and who therefore knows how difficult it is follow the line of its thought and discussion, in view of the mass of its repetitions, the subtlety of its metaphysical implications, and the apparent inconsistency among the different concepts in it, can fully realize the importance of applying — as Conze does — as detailed a systematic organization and order as possible to texts of this kind.

But the excellence of the translation does not end with these qualities of a general nature:

rather, it reaches its culmination, so to speak, in the perspicuity and in the precision with which the complex Buddhist terminology is rendered in English (for example, among the many happy solutions: « the *dharma* and its logical sequence » for *dharmānudharma;* « the sustaining power of truth » for *satyādhiṣṭhana;* « states of woe » instead of the mere « evil states » for *apāya*). The result is a conspicuous enrichment and completion of the already fine translations offered by Edgerton in his dictionary and, for the Prajñāpāramitā specifically, by Obermiller (cfr. *The doctrine of Prajñāpāramitā as exposed in the Abhisamayālaṁkāra of Maitreya,* Acta Orientalia vol. XI, pp. 1-133). It is a pity that the translation, presumably for editorial reasons, follows the text: we should have preferred to have it facing the text. The explanations necessary to an intelligent reading of the contents, drawn for the most part from Haribhadra's commentary, are presented in an abundant compilation of notes. In two previous volumes (*Abhisamayalaṃkāra,* 1954 and *Vajracchedika Prajñāpāramitā,* 1957, both published in S.O.R., IsMEO, Rome) the Author has already undertaken to provide a glossary. For this reason, he has not thought it necessary to add it to this latest work as well. The more so since, as we are delighted to learn in the introduction, he is now working to prepare a volume to be entitled « *Materials for a Dictionary of the Prajñāpāramitā Texts* ».

Corrado Pensa

Swami Prabhavananda, *The Spiritual Heritage of India* (London, George Allen and Unwin, 1962, pp. 374).

Whilst with the Brāhmaṇa the cycle of literature on sacrificial liturgy comes to an end, it may be said that with the Upaniṣads there are signs of a need to go back and deal with the subject of the ritual, the pure Ego, immersed in its Infinity. It is as if the *ātmanbrahman* theme, which lies at the heart of the Upaniṣads, is gradually and continuously confirmed in the evolution towards a human and individual experience: an attempt, in other words, to set against the contingent aspect of the individual the latter's trascendent origin.

This is an effort which continues for centuries in India up to the teaching of Rāmakṛṣṇa and the action of his best disciples — until the admirable synthesis of Yoga elaborated by Srī Aurobindo. An attempt to maintain a link with the trascendental in spite of the fact that human experience becomes more and more material: an attempt aiming at the bringing to the fore of a memory of reality which will run the risk of being forgotten or denied when an exclusively sensuous experience of the world becomes the basis of a new civilization, which cannot be a culture in the real sense of the word if it denies the spiritual elements which in any case form its inner fabric. This is the contradiction of our contemporary civilization, which derives its strength from the spiritual element in order to deny it.

The work of Swāmi Prabhavananda is a synthesis of what was and has been the mission of India, namely the guardianship of values on which human experience is based and without which the human element would no longer have any sense. He follows the meaning of this mission through the various forms of Indian spirituality: from the thought expressed in the original texts and in the subsidiary Scriptures, on to the great ascetic religious movements (Jainism and Buddhism) up to the systems of « knowledge » (Nyāya Vaiśeṣika, Sāṃkhya, Patañjali, Purva Mīmāṁsā, Vedanta Sūtras) and to the great exponents of the Vedanta, from Gaudapāda and Śankara until Rāmakṛṣṇa.

It is evident that he does not deal with the subject merely as an aspect of culture but as a piece of personal research, as an inner experience. He is undoubtedly one of the guardians and continuers of this heritage. It would however be desirable for this heritage to be passed on as the inner workings of the soul of the modern ascetic, who would thus show himself capable of grasping the process of modern civilization as something which lives and moves in him. Because this would be the only way for such a heritage to continue to function, *i.e.* by being the transcendental counterpart of a system of science and techniques which has also reduced the transcendental to a rational level. In such a cultural system, the transcendental is contemplated but does not live. It has become a name: it is essential to restore to it the contents indicated by its name. Only thereby can a spiritual heritage be said to have a real function.

Massimo Scaligero

Harvey Day, *The Study and Practice of Yoga* (University Books, New York, 1955, pp. 160).

In line with the popularisation of Yoga for the use of the modern Western practitioner, the author has achieved a simplification primarily connected with the *Hatha-yoga* aspect which, by means of various exercises involving movements and postures of the body, offers convincing points of reference.

This practical aspect which has always been intended as a preparatory physical discipline, inasmuch as the body must cease to constitute an obstacle to spiritual experience, is nevertheless integrated by the various exercises in concentration and meditation. These are, in fact, the beginning of Yoga: which is the action of the spirit, both as study and as practice, the study already becoming practice here, even though only preliminary. There is no body posture or breathing system which is not, in the final sense and meaning, a movement of the spirit.

Those who begin by considering *āsana* an act of the body, which, being performed by the body, can automatically have a spiritual value, can never practice Yoga. The prior condition is that the spirit possesses nothing outside of itself and there is no movement of the body that is not, at the same time, thought. This is a field in which the distinction between theory and practice is meaningless.

Massimo Scaligero

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LINGUISTICS

Ferdinand D. Lessing, General Editor, *Mongolian-English Dictionary* (University of California Press, Berkeley and Los Angeles 1960, pp. xv + 1217).

The dictionary now published by the University of California is the result of work undertaken several years ago by a group of specialists including Mattai Haldod, John Gombojab Hangin and Sergei Kassatkin, under the direction and with the participation of the late Professor Lessing.

In a few introductory pages Professor Lessing relates how and by what means this dictionary was compiled, and the general principles that were followed in its elaboration. Then he explains the system of transliteration followed for written Mongolian; it is somewhat different from those hitherto employed, in as far as it replaces the old transcriptions *ö*, *ü*, *č*, *j* with new ones without diacritical marks (*a*, *y*, *c*, *z*); it simplifies the groups *ayi*, *eyi* into *ai*, *ei*; and it employs *x* for *q*, which is not strictly necessary for written Mongolian. As a matter of fact these modifications will merely complicate matters, as the ancient system of transliteration of written Mongolian remains widely employed.

Beside these minor remarks, may I be allowed to express my regret that a substantial number of words in Mongolian characters have been cut out in order to gain space, which hampers easy reading. But it can be easily understood that Professor Lessing and his collaborators took this way in order to reduce the bulk of the work, which otherwise would have necessitated two volumes.

The dictionary is followed by several indexes. A Cyrillic index (pp. 1087-1133) enabling the reader to find the Latin equivalent of the words transcribed in Cyrillian characters; an index (pp. 1135-1155) giving the transliteration of words transcribed in Mongolian characters which can be read in different ways, owing to the ambiguity of the Mongolian script in which the letters *t* and *d*, *o* and *u*, *ö* and *ü*, *a* and *ä* (in the interior of the words) are represented by one and the same sign; a supplement (pp. 1157-1193) dedicated to Buddhist terminology; additions and corrections (pp. 1195-1217), containing a certain number of terms taken from the works of several specialists.

We welcome this dictionary, which will simplify the work of Mongolists from several points of view. First of all it gives, collected in one great list, the greater part of the words of the Mongolian written language, supplied with a transcription. This will enable beginners in the study of Mongolian to read effortlessly words for which they met with serious difficulties, owing to the ambiguity of the Mongolian alphabet. Kovalevskij is not always a sure guide, and Golstunskij, although more complete, cannot be utilized by beginners, both because very race and because it is lithographed and difficult to read; to all this we have to add the fact that numerous supplements are meant to complete the work and cause such a disorder that one must search for a long time for certain words before finding them.

Lessing's dictionary is more complete, as it incorporates the material of the dictionaries published in the USSR during these last thirty years, the great dictionary *Mōko-go Daijiten* published at Tōkyō in three volumes between 1933 and 1936, which is practically nearly inaccessible, and the Ordos dictionary of Father A. Mostaert, which contains a good many words of Classical Mongolian and of Ancient Mongolian in the index found in its third volume. Beside the words of Classical and of Ancient Mongolian, Lessing and his collaborators selected and included in their dictionary a large number of modern words culled from the dictionaries published in the USSR and from the *Mōko-go Daijiten*. They might have utilized as well the *Mo-wa jiten* published in 1928, 1937 and 1940, the *Mēng-wēn tzu-tien* printed at Peking in 1913, and the *Mēng-Han tzu-tien* or *Mongqol-Nanggiyat üsüg-ün toli bičik* published by the Monggol bičig-ün quriya at Peking. These dictionaries are not very rich, but it was worthwhile to check their lexicographical contents and to report on them.

Turning to the bibliography selected by Lessing, it is not easy to understand why he chose such Mongolian texts as the *Altan Tobči* (ed. Bawden), Father A. Mostaert's work « Sur quelques passages de l'Histoire secrète des Mongols » and articles by Pelliot, Vladimircov and Poppe, excluding numerous works bearing on the same subject, or texts of as great a value as the several chronicles of the 17th century, the text of which was published in fact-simile only (e.g. the Ulan Bators ms. of Sanang-sečen published by Haenisch), or the texts contained in the anthologies of Kovalevskij and of Pozdneev, or those of the *San-kuo yen-i*, of which we have two Mongolian editions, and of the *Liao-chai chih-i*, whose vocabulary is so rich.

The present dictionary is thus composite; it gives the lexicographical material gathered since the 19th century, as well as the one drawn from a small number of works bearing upon texts from 1240 down to our own times. I think it would have been better to be less ambitious (such ambition being, however, commendable in itself) and to give us a more homogeneous dictionary referring to the classical language alone, leaving resolutely aside Ancient Mongolian (whose survey is still going on) and the modern terms created in the course of the last forty years. Professor Lessing and his collaborators certainly thought of these aspects of the problem, but they preferred to give us the results of their survey. They were not wrong, because this dictionary will be of great service not only to non-specialists or to beginners, who will be able to find quickly the explanation of the word whose meaning they are looking for, but also to Mongolian scholars, who will profit of the same advantage; if they wish to push their researches farther, they only need to employ the special dictionaries available to them. Every new work implies some risks of imperfection; in my opinion, the one carried out by the late Professor Lessing and his collaborators will be of great service and we must congratulate ourselves on its publication.

LOUIS HAMBIS

LAURENCE C. THOMPSON and NGUYEN DUC HIEP, *A Vietnamese Reader* (Seattle, University of Washington Press, 1961, pp. XVI 368).

This volume, which may be considered complementary to the *Introduction to Spoken Vietnamese* by Robert B. Jones and Huynh sanh Thong (Washington, American Council of Learned Societies, 1957), is a useful reading manual for those who wish to broaden their knowledge of spoken Vietnamese. The Vietnamese text is the work of Mr. Nguyen duc Hiep and in addition to being useful for the practical use of the language, which is that of an able journalist and writer, also provides useful information on the social life of Vietnam today. The notes accompanying the text and the final Vietnamese-English glossary are, on the other hand, Thompson's own work. The work is written for practical rather than philological purposes; nevertheless, it is highly useful to those who wish to undertake the study of Vietnamese.

LIONELLO LANCIOTTI

NEAR EAST

H. E. Del Medico, *L'Enigma dei Manoscritti del Mar Morto* (The Enigma of the Dead Sea Manuscripts). A translation from French by Roberto Cantini. (Milano, Il Saggiatore, 1959. Pp. 430).

The question of the Hebraic and Aramaic manuscripts as found in Spring 1948 in Qumrān grottoes, near the Dead Sea, still excites the scholars and the laity all over the world, not only on account of the hypotheses to which their interpretation gave rise, but also because of the vicissitudes that marked the recovery of their fragments in the hands of Banū Taʿamīra Bedouins.

Owing to a number of reasons the question of their historical and religious exact attribution is very far from being settled. First of all we do not know both the state of the grottoes and their contents before they were searched again and again in the course of ages. Not all the manuscripts in the hands of clandestine holders have been recovered so that we are not able to form a general idea of that literary genre and to establish their undoubted source. A third reason is to be found in the fact that the manuscripts which are presently known are widely heterogeneous and show that they were written in different ages, by members of different sects.

The vague circumstances on which the last discoveries have been made, the historical events, and the archeological features peculiar to the area where those documents were found, lead to formulate contrasting hypotheses on their origins. According to one of the most widely disseminated theories, those manuscripts formed part of a library of the Essenes mysterious sect and were hidden in the grottoes, where they have been found of late, in the times of the Roman repression following Bar Kokeba's well known rebellion, in 125 A.D. Such a hypothesis is supported by the existence of both a cemetery and some ruins of a building close by the grottoes. These ruins are regarded as the remains of a monastery of Essenes even though, owing to the extreme aridity of the place, the existence of a flourishing community of any kind was unlikely even in the earliest times. The various aspects of such a puzzling problem have been examined with a deep insight and without prejudice or partiality to a particular solution by H. E. Del Medico. In his work, as translated by the French original, the well-known Semitist shows a synthesis of the results he has reached through a careful historical, religious and linguistic investigation, together with the translation of the main texts.

By a close and convincing argumentation, as supported by his profound learning, Del Medico upholds his thesis — a probable one, indeed — according to which a « ghenīzah » was a cemetery of books which could no longer be utilized because of either their ruined state or their heterodoxy and, out of ritual purity, could neither be burnt nor destroyed. In fact all the ghenīzōth of the Orthodox Hebrews are joined to a cemetery, in the East, under the provision that religious or traditional texts which turn defective and therefore to be considered « pasūl », are to be either buried near the grave of a learned man or hidden under ground anyway. And the various ghenīzōth which have been discovered of late are cited as an example. This is the case of the Qaraìts one, at Cairo, which contained some fragments of three manuscripts of a Hebraic version of the Ecclesiastes that Kahle traces back to the Essenes themselves.

As things are, every text has its particular story which its peculiar state of destruction or repair shows. On this subject the Author examines minutely those documents which appear as the most singular in the collection: the « Disciplinary handbook », « The Book on the War of the Sons of the Light against the Sons of Darkness », «Thanksgiving Hymns», «The Apocryphal Genesis », « The Document of Damascus », etc. In the Author's opinion these works pertain to non-rabbinical sects like the mediaeval one of the Qaraits or the ancient ones of the Ṣaddūqeans and the Zelots: they would have been deposited in the above mentioned « cemeteries », in the long run, when they were taken away and condemned as heterodox works by a more and more prevailing rabbinism. In the light of the complex events which stirred up an tormented the Hebraism from the 1st to the 4th centuries A.D., these hypotheses appear extremely acceptable. All the more that those documents really reflect the hopes of renewal and the ideals the opposing Hebraic sects cherished in the earliest centuries of the Christian Era, before the Roman repression on one hand and the increasing rabbinical orthodoxy on the other hand rooted them completely out. In his search for the sources of the manuscripts, the author vividly describes the characters of the various Hebrew trends, their customs and the historical events through which they passed from the time of Pompeius Magnus to Antoninus Pius. In an extremely important section of his work Del Medico denies the existence of the Essenes and states that Philo from Alexandria found out their name. Philo had never been in Palestine and, through his Utopia, he wanted to give the Gentiles proof that coenobitism — a mere Egyptian phenomenon in the first century A.D. — was not incompatible with Judaism. Their town near the Dead Sea, with its luxuriant vegetation, would have been a product of the imagination of Pliny the Elder. Some believed in the Essenes. This is the case of Dion Chysostom who, however, was highly criticized by Synesius of Cyrene for such a belief. Others — the author states — looked for actual proofs of their existence: Hyppolitus did not find anything to bear out Philo's and Plinius' words and he probably thought that the Essenes' name was either a corruption from the Hebraic word « hazanīm » (keepers of synagogues) or the one that was attributed to the Elkesaites from Transjordania and Samaria. Josephus' second interpolator in the « Judaic Antiquities » — the author points out — identified the Essenes with rural people. Echoing T. Reinach's opinion, Del Medico states that it is only a question of an arbitrary transformation of Judaic sects, with quite a different character, into Hellenizing philosophical schools.

Now, taking for granted the scientific validity of the arguments Del Medico brings against the actual existence of the Essenes, as traditionally conceived, and supposing, as seems to be proved, that the documents of the Dead Sea have not that esoteric character that would make them attributable to the sect of the Essenes, as Philo describes it at least, it is highly questionable that the celetrated neoplatonic philosopher, an ethnarch of the Hebrews in Egypt and as such one of the most eminent personalities of Judaism of his time, could have completely invented such a singular sect only to give free play to his imagination and would have not taken into consideration that such a fantastic yarn would have been soon denied, to his reputation's prejudice. In fact he was talking about a community in full existence at his time.

A positive conclusion can be drawn from Del Medico's work as regards the Essenes: such a problem is to be taken again into serious consideration not only through the sources in which their name is to be found — extremely vague and opinable sources but for Philo's testimony — but also through a new study, above all, of those elements in the Hebraic world which, surely outside the rabbinical orthodoxy, from the first century B.C. to the first century A.D. tried to create a higher synthesis of Greek mysteriosophy, Egyptian ascesis and testamentary revelation to prepare the coming of a new age to mankind, rather than merely the anti-historical restoration of political and religious values that concerned exclusively the small Hebraic community.

As for the other subjects, Del Medico's book has the merit of being a scientifically based work. In spite of that it is open to the layman as well. But Del Medico's researches have an inestimable value: in fact they appear to be guided both by a synthetic vision of the problems at issue and a good common sense.

Pio Filippani-Ronconi

Jawad Boulos, *Les peuples et les civilisations du Proche Orient. Essai d'une histoire comparée, des origines à nos jours*. Tome I (Mouton et Co., 1961. s-Gravenhage, pp. 432).

The task of writing an inclusive history of the civilisation of the Near East lies at the bottom of the basic idea of this work: its assumption is that this history expresses an evolutionary trend thousands of years old and still under way which cannot be understood if it is broken up and viewed only analytically.

Born in Lebanon, the Author intrinsically belongs to the world whose history he aims at reconstructing, this task constituting almost a solemn commitment on his part not to allow himself to be limited by external facts and by one-track ideas or excessively academic concepts. He succeeds in perceiving the spiritual constants embodied in the ethnic-geographical fact and which use historical-political events to express themselves as a changeable form; this mutability, however, is the mark of the profound inner continuity of an evolution which in itself is the fundamental fact.

The author recognizes and defines this evolution, separating it from the external transformations of the phenomenon of invasions and from radical social events, all of which have affected the languages, the institutions, and sometimes religions, but without changing the profound underlying « soul » of these peoples. That spirit has always maintained the initiative, even towards those who were apparently conquerors, all of whose cultures have undergone essential modifications in the course of their contacts with the civilisations of the Middle East. Even though Greco-Roman civilisation overcame the Semito-Egyptian one, this was not achieved without far reaching exchanges and interpenetrations taking place.

The Greco-Oriental, or rather Greco-Syrian and Greco-Alexandrian aspect of Helleno-Roman civilisation is traceable to the influence of that Semito-Aramaic culture which thrived so long in the environment of Syria and Mesopotamia.

The subject of study in this work is the Mediterranean and Arabic East as to location in space. As to historical perspective, it is the setting of historical events in terms of the persistence of the ethnic-geographic and ethnic-psychological causes, which are still present, and which have always reacted in a constant and homogeneous way to all contacts, whether peaceful or warlike, with other peoples, to immigrations, to the passing movements of traders or conquerors, and to the given politico-social variations.

Massimo Scaligero

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PREHISTORY AND PROTOHISTORY

Mogilnik Bronzovovo Vieka Kokcha 3. (The burial site of the bronze age Kokcha 3). (Academy of Science of the USSR. Materials of the Khoresm Expedition published under the general direction of S.P. Tolstov. Fifth issue. Moscow 1961. 2 maps, 38 drawings and photographs, 17 tables, 150 pages).

The volume contains a very long article by M. A. Itina on « The excavations of the burial site belonging to the Tazabag'yab culture Kokcha 3 », an article by T. A. Trofimova « The sculls from the burial site belonging to the Tazabag'yab culture Kokcha 3 » (excavations of 1954-1955), and two very short articles or rather appendixes: G. V. Lebedinskaya « A short description of the reconstruction process of the head by means of a skull of a boy from the burial site Kokcha 3 » and Y. A. Durnovo « The long bones of the extremities of the skeletons from the burial ground of Tazabag'yab culture Kokcha 3 ».

M. A. Itina

Archaeological research in Central Asia which was carried out on a vast scale after the Second World War, gave valuable new information on the tribes living there in ancient times, and especially on those belonging to the neolithic and bronze ages. Central Asia was until recently a white spot on the archeological map of the USSR, but today it is being gradually filled in, and begins to show the great historical importance of the people who once inhabited its territories. The bronze age is in this respect of the greatest interest for it was precisely during this period that the great tribal migrations took place and important changes in their social organization occurred.

It should be pointed out that the bronze age has been studied in the European part of the USSR, at the foot of the Urals, in southern Siberia and in Kazakhstan on the basis of tombs which had been discovered, whereas in Central Asia ancient settlements served that purpose. The territory of ancient Khoresm, along the right bank of Amu Bariya, contains a great number of settlements of the bronze age belonging to the first millenium B.C., which allowed S. P. Tolstov to distinguish 2 different cultures: the Tazabag'yab culture which has some common traits with the cultures of the Volga steppes, of western Kazakhstan and the slopes of the Ural mountains, and the Suyargan culture which is linked with those of northern Iran and part of Turkmenia.

In the middle of the second millenium B.C. the Suyargan and the Tazabag'yab cultures co-existed simultaneously in southern Khoresm, but towards the end of this millenium the Suyargan culture assimilated the latter and continued to exist in the form of the Amirabad culture which belongs to the late bronze age.

The discovery of the burial site of the Tazabag'yab culture Kokcha 3 was very important since it allowed to check once more the above mentioned conclusions making use not only of archeological but also of anthropological data. The importance of this discovery cannot be overestimated since Central Asiatic archeology is not rich in burial sites which belong to that period. The fact that the Tazabag'yab culture belongs to the group of Eurasian bronze age cultures of the steppes, and that there exists the possibility of its having been formed in the steppes of Western Kazakhstan and along the Southern slopes of the Ural, are sufficient reasons, when studying the material found in the tombs of Kokcha 3 to give special attention to those of Kazakhstan and of the Ural and Volga regions.

The burial site Kokcha 3 was discovered quite accidentally in August 1954 during an expedition to the oldest delta of Amu Dariya - Akcha Dariya. Some vases protruding from the ground, 6-7 kilometers west of the mountain Kokcha drew, the attention of the explorers. Probational excavations were started that very year under the direction of S. P. Tolstov, and full scale work was continued in 1955 under his and the author's direction. Many tombs were practically non-existent at the time of their discovery, and in the best of cases it was only possible to find the base of a vase. However, the search produced 93 vases, bronze objects, ornaments, beads, etc. The shallowness of the tombs was very harmful for the preservation of the skeletons thus rendering the digging out of the skulls and bones extremely difficult. Inspite of this, 41 skulls were removed of which 31 form a very interesting collection. It should be mentioned that the territory of the southern Akcha-Dariya delta near which the tombs were found, was thickly populated during the bronze age and remnants of an interesting settlement were discovered in the immediate neighbourhood of the site. Slightly to the south of this settlement and of the burial ground Kokcha 3, remnants of two other settlements were discovered: Kokcha 1 and Kokcha 2. The first belonged to the Suyargan culture and showed traces of ancient fields, whereas the second to a mixed Tazabag'yab-Suyargan culture. Moreover, to the south east of the tombs and of the settlement, lay ancient fields provided with a primitive irrigational system — the oldest in Khoresm.

The burial site of Kokcha 3 lies on patches of cracked desert soil, called « Takyr », and is surrounded by sandbanks 1-2 meters high. It is situated some 100 meters north of one of the lateral courses of Akcha-Dariya. About 100 meters west of the tombs is another river bed 20 to 30 meters wide and 1,2 meters deep.

There are at present three levels of these patches of dried cracked desert soil or takyr. The origin of these three levels has yet to be established, and one does not know whether they are due to alluvions or other causes.

The settlement with the fields and the tombs lies at an equal and even lower level than the nearest river bed. The « takyr » on which they lie is formed of clay and sand. Between the tombs and the river bed which runs a level of 1,2-1,3 meters above the first « takyr », lies the second « takyr ». The third and biggest «takyr» stretches along the course of the river some 3,7 to 4 meters above it.

Remnants of over 100 graves were discovered on the lower « takyr ». They bear no signs of tomb stones or other funeral monuments. The presence of a tomb could be established thanks to a rectangular shade of the grave which contrasted with the lighter hue of the surrounding ground. Moreover, numerous fragments of pottery, bronze bracelets and beads were found on the surface. The average present day depth of the graves is 0,100 to 0.400 meters, which proves that the burial site of « Kokcha 3 » and the adjacent settlement had undergone destruction. It is difficult to say what was the original level of the ground, but it is quite obvious that the tombs as well as the settlement lay above the then existing river. It can be presumed that the level was probably 1 to 1,5 meters higher than today and as high as the second « takyr ». Its surface is also just as even.

At the time of the excavations, the area occupied by the tombs was 143 × 67 meters. Although nothing can be said as to whether the tombs were surmounted or not by piled up earth, it can be quite definitely stated that they were not surrounded by stone enclosures. Of the 74 tombs which have been unearthed, 43 were more or less well preserved and they form the basis of the present study. Of these 43 tombs 27 belonged to adults and 16 to infants. In the remaining 31 tombs no remnants of bones have been found but only some funeral objects. It can be assumed, however, when one considers their size, that 23 belonged to children and 8 to adults. The 43 preserved tombs have been classified as follows: 5 single feminine, 10 single masculine, 3 couples of opposite sexes simultaneously buried, 6 couples buried at different periods, 1 feminine couple buried simultaneously, 1 feminine couple buried not at the same time, 1 woman with a child, 13 single children, 3 children in couples buried simultaneously. All the tombs are of a rectangular or square shape with rounded up corners. All of them, with a very few exceptions, are facing east-west. They can be divided into 3 categories: 1) big tombs: 2,2-2,5 × 1,8-2,0 m. for couples; 2) tombs: 1,0-1,5 × 1,7-1,9 m. for single bodies, and 3) small tombs: 1,2 × 1,0 m. or 0,7-0,9 × × 1,2 m. for children.

The depth of the tombs was not always the same as can still be seen today. Some of them are only 0,3-0,6 m. deep, whereas there is one which even today is 85 cm. deep. The depth depended upon the nature of the ground. In clay soil they were shallow whereas there where sand predominated and the layer of clay was thin, they were much deeper since digging did not require much effort. Since the soil of the site is mainly of clay, the majority of the tombs is shallow, especially those of children.

In some of the tombs remnants of vegetable matter were discovered, and this leads to believe that some bodies were wrapped in some sort of material made of reeds or that reed litter was used. It is worth mentioning that the clay soil contained layers of grey sand and that the bodies were buried in the sandy layer.

The position of the body is very characteristic. It is bent, with the legs drawn upwards towards the stomach and the arms also bent with the hands resting under the chin or under the head. It does not seem that the bodies were tied except in a few cases of children, in that of a young man and of a couple. The latter, a young man and an elderly woman, seem to have been buried alive together as appears from the position of their heads, hands and open mouths. The bodies were buried in the western direction with a certain deviation towards the south and less often towards the north. It is very interesting to note one peculiarity of the burial ritual of Kokcha 3, and this is, that the men were buried on their right side whereas the women on their left side. An exception is made only for children and in the case of two young women aged about 17 or 18 who are buried together. Some of the male skeletons lie also face downwards.

The ritual also demanded the placing at the head of the body of a clay vase, but the number of these vases does not always correspond to the number of the bodies. In one of the tombs pieces of charcoal were found. The practice of placing charcoal near the funeral urn was not uncommon at the time of the Andronov culture and symbolized the preparation of food for the deceased. Many of these urns have traces of smoke on the outside. No remnants of animals were found in the tombs of Kokcha 3 except for some small bits of birds' bones, and that only in one tomb. It seems that the main industry of the district was breeding, and that the placing of meat in the tombs was forbidden. The objects which were found were stone or bronze ornaments, bronze needles (for women) and four edged skewers with a bone handle (for men).

As not all the bodies lying in couples were buried simultaneously, larger tombs were dug in order to leave sufficient space for a later burial of a second person. They were opened at the death of the second partner. This has been proved by some large single male tombs where the skeleton lies in its northern part leaving the southern empty, and by large single female tombs where the skeleton lies in the southern part leaving the northern side free. Moreover, in some tombs one of the skeletons shows obvious signs of having been disturbed or pushed aside in order to provide the necessary space for a new body. In the majority of cases of double burials, the bodies seem to belong to the same age group. It is necessary to point out, that in those double tombs where the bodies were not buried simultaneously, the female skeleton wears ornaments, whereas there where the couple was buried at the same time there are no traces of feminine ornaments except for one case of a bronze needle and one case of a bracelet.

There is no doubt that Kokcha 3 was the burial ground of a big community with a well established family organization, and was laid out according to a certain plan. All the single male tombs lie on the north eastern and south eastern edge of the burial site and the majority of the adults are buried also in the south eastern part whereas the children are buried without any order.

The pottery of Kokcha 3 is very varied and consists of 93 vases of unequal degrees of preservation. These vases are all made of clay mixed with crushed shells and are not evenly burnt, showing therefore a spotty surface. Many of them carry traces of smoke. This collection can be divided into several groups.

1) The biggest group is formed of typically Tazabag'yab vases with a short, flat and slightly bent-in top or neck, a wider central part which gradually narrows down at the base. They are not large and the diameter is 12 to

14 cm. at the top and 6 to 8 at the bottom, and the height not over 14 cm. 2). To this group belong slightly bigger vases with a nearly straight short neck, sometimes a very protruding body and a base which is half the size the top (22 and 11 cm, etc.). This group presumably belongs to the 14th-12th century B.C. 3) The vases of this group have a very straight short neck and a very accentuated shoulder. This is a very interesting group. Some specimens are without any ornament, but the majority are richly decorated with different combinations of broken lines and triangles. 4) This group possesses a shape not unlike that of a jar with the diameter of the neck by 4 to 5 cm. larger than that of the base. 5) The vases of this group have a biconical shape and as a rule are not large. They have small holes at the top for hanging up. 6) This is a fairly large collection of small cups with thick sides (0,7 - 0,8 cm) and with rims that sometimes bend inwards. 7) Vases which belong to this group are few in numbers but can be often found in ancient settlements. They are jar shaped and are richly decorated with geometrical designs. It is very likely that many pieces of pottery have been specially made for funeral purposes for quite a number show no traces of having ever been used in the household.

The bronze objects belong to two groups. The skewers which were put near the body of the man, and needles, bracelets, rings, beads and hair ornaments which belonged to the body of the woman. The bronze which was used contains a fair proportion of lead.

T. A. Trofimova. *The skulls from the burial site belonging to the Tazabag'yab culture Kokcha 3.*

The skulls found in the tombs of Kokcha 3 are in a very bad condition. In 1954, a complicated work of restauration had to be undertaken in order to save them from utter destruction and permit their examination. The number of skulls which were dug out in 1954 were 7 male and 8 female, without counting fragments of those destroyed. The excavations of 1955 produced another 26 skulls unequally preserved as well as fragments of others. A collection of 14 male and 10 female skulls was formed for the purpose of taking measurements and drawing statistical tables. To this collection some other skulls of adults and infants were added.

Both the male and the female skulls belong to the following racial types: Indo-European, Mediterranean, European with certain features of the Andronov type, and European-Equatorial. Among the female skulls a pure Andronov type was also found.

The examination of the long bones of the skeletons has permitted to establish the size of 10 male and 5 female skeletons. The average stature of the men is above the medium and that of the women above the medium or even tall. These measurements were made according to formulas of Manouvrier, Trotter, Glaser and Martin. The stature of the men goes from 156,6 cm to 182,6 cm, and that of the women from 155 cm to 165 cm.

Considering that in the second half of the 2nd millenium B.C. there existed in the region of Akcha Dariya and of the burial site of Kokcha 3, the Tazabag'yab and the Suayargan cultures which were linked with people inhabiting very different regions, it can be assumed that there existed simultaneously two different ethnic groups, which explains the anthropological differences among the people who were buried at Kokcha 3.

Of special interest are two skulls. One belongs to a boy of about 10, and the other probably also belongs to a boy of about 7 or 8 years. Both skulls possess some of the characteristics of the Equatorial type, and one of them has much in common with the south Indian type. Moreover, the tomb of the latter contains pottery belonging to the Suyargan culture and is quite different from the pottery of the other tombs. This fact could prove the recent intermingling of different tribal groups, but the question where and when the amalgamation between the Equatorial and the European type took place cannot be answered on the basis of the available material. It can be only said, that in the 13th-11th centuries B.C. the popoulation of the Akcha Dariya was already mixed, but not since long, and still consisted of two separate groups.

The two last articles, one on the reconstruction of the head on the basis of the skull of a boy from the burial site of Kokcha 3 by Lebedinskaya, and other on the long bones of the extremities of the skeletons from the burial ground of the Tazabag'yad culture of Kokcha 3, are two appendixes and purely technical.

Alexander Sollohub

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SINOLOGY

Yang Lien-sheng, *Studies in Chinese Institutional History* (Harvard-Yenching Institute Studies, XX, Cambridge, Harvard University Press, 1961, pp. II, 229).

In this volume nine of the most important articles by Yang Lien-sheng, Professor of Chinese History at Harvard University, which previously appeared in the period from 1946 to 1957 in the *Harvard Journal of Asiatic Studies*, are very opportunely reprinted. The titles of these nine articles are: I. Toward a study of dynastic configurations in Chinese history; II. Schedules of work and rest in imperial China; III. Hostages in Chinese history; IV. Economic justification for spending. An uncommon idea in traditional China; V. Numbers and units in Chinese economic history; VI. Notes on Dr. Swann's *Food and Money in ancient China;* VII. Notes on the economic history of the Chin period; VIII. Buddhist monasteries and four money raising institutions in Chinese history; IX. The form of the paper note Hui-tzu of the Southern Sung dynasty. We have judged it more useful to mention the reprint of these significant articles in a single volume than to review them at length, inasmuch as these are contributions which are already well known and favorably accepted by sinological criticism. The volume closes with several pages of additions and corrections (pp. 225-228). The sole cause for regret in such a praiseworthy reprint is the absence of a detailed index of names which would have made the volume even more useful.

Lionello Lanciotti

Tung Tso-pin, *Chronological Tables of Chinese History* (*Chung-kuo Nien-li-tsung-p'u*) (Hong Kong, University Press, 1960, 2 vol., pp. XV + 357 + 412).

A work like this is to be noted and recommended for its usefulness, rather than reviewed. It is one more working tool that should not be missing in a good sinological library. The work is divided into two separate parts: the first covers the period from 2,674 B.C. to the year 1 A.D.; the second, on the other hand, runs from 1 A.D. to 2,000 A. D. The chronology followed gives the dates 2,183-1,752 B.C. for the legendary Hsia dynasty; 1751 B.C.-1112 B.C. for the Shang dynasty; and the third dynasty, the Chou, is given as beginning in 1111 B.C.

Besides the cyclical year, the readings of the pre-Republican year up to 1912, the Julian year and, even, the Moslem year from 622 A.D. (*year of the hegira*) onward, are indicated in relation to the Christian (or pre-Christian) year.

Some appendixes contain lists of the Chinese dynasties, the emperors and periods of their reigns, comparative chronological tables concerning each historical period; in addition, there are some charts which aid in calculating the transposition from western years to Chinese cycles and viceversa. This highly important work is supplemented with indices to the chronological charts, arranged by number of strokes and in alphabetical order.

Lionello Lanciotti

Martin Piasek, *Fabeln des Chinesischen Altertums in moderner Sprache zusammengestellt* (Chinesische Übungstexte, Heft 1, Leipzig, VEB Verlag Enzyklopädie, 1961, pp. 48).

This small book contains twenty two passages by Chinese classical authors (Chuang-tzu, Lieh-tzu, Han-fei-tzu) translated into modern Chinese. Each passage is accompanied by its transcription and by a few but exhaustive notes. As the book was intended as a text for students of modern Chinese, the translation has very sensibly not been included. It is a little volume of undeniable teaching value, of the same kind as that by Mrs. Y. C. Liu, « Fifty Chinese Stories » (London, 1960) which, however, provided the advantage of setting the original classical text side by side with the modern Chinese translation.

Lionello Lanciotti

Martin Piasek, *Chinesisch-Deutsches Wörterbuch* (Leipzig, VEB Verlag Enzyklopädie, 1961, pp. XIV + 342).

We owe this concise but useful Chinese-German dictionary to Dr. M. Piasek of the *Ostasiatischen Institut* of the University of Leipzig. It contains 2,000 ideograms and about

12,000 words composed of combinations of these ideograms; conceived as a dictionary of the modern language, it is to be recommended to those who wish to work in this period of the Chinese language. The dictionary ends with a list of geographical terms and the list of 425 abbreviated ideograms, arranged by the total number of strokes.

LIONELLO LANCIOTTI

LUCIANO DALSECCO, *Elementi di cinese moderno* (Bologna, Edizioni Alfa, 1962, pp. 222).

This is a grammar of the modern Chinese language by an author who appears for the first time with a work on China. (The forthcoming publication of another grammar, « Elementi di russo moderno », by the same author has been announced). In his brief preface the author explains that « this language is logical, simple and concise » (p. 5); until the author presents some « illogical » language, and leaving it to professional sinologues to determine the simplicity or lack of it of Chinese, we feel that the monosyllabic nature of Chinese may have led the author to declare that Chinese is « concise »; Classical Chinese might, roughly, be defined « concise », but certainly not modern Chinese which the author deals with. The 15 chapters in which the grammar is organized indicate a certain amount of work done in re-working other grammars; the absence of ideograms in the text will certainly not facilitate the efforts of those who undertake the study of Chinese with the aid of this grammar, but the author appears to be a convinced promoter of the possibility of learning Chinese with the new phonetic alphabet. There are some other somewhat odd statements by the author: « Chinese writing in the last two hundred years has not been modified » (p. 125) for instance; perhaps he meant to say it had not been modified in the last two thousand years!

On the whole, it is an enthusiast's attempt, one which, however, does not seem to us worthy of much praise. We do not recommend this grammar, due to certain oversimplifications and, especially, because if anyone had to use the « Ideographic repertory » (pp. 131-192) at the end of the volume as a basis for learning to write Chinese, he would end up writing like a first-grade elementary pupil with rather poor handwriting. The volume ends with a little vocabulary in Italian and Chinese.

If we wish to give a complete opinion, we may say that this is a work which should neither be wholly praised nor wholly condemned: it is not a work of scientific research, nor a practical manual, because in many respect it is incomplete. In any case, it is a work we do not feel we can recommend.

LIONELLO LANCIOTTI

LAO TSE, *Tao Te King. Traité sur le principe et l'art de la vie des vieux maitres de la Chine. Introduction, traduction, glose, commentaires et notes par* JACQUES LIONNET (Paris, Adrien-Maisonneuve, 1962, pp. 205).

Here is another translation of *Lao-tzu*. It is preceded by over 50 introductory pages on Chinese philosophy, the myths and legends of China, with continuous references to the philosophy and history of other Oriental and Western countries. In reading this introduction we have the impression that it must have been written a long time ago; it is conceived, we venture to state, according to ideas and systems which are by now outdated for some time. The bibliographical references also take more account of old sinological works than of others. We need only note, moreover, that in support of some sinological subjects, the author cites works by Ossendowsky or other authors who certainly cannot be considered qualified sinological scholars. There are many printing errors (for example, *T'ao-t'i*, p. 11, for *t'ao-t'ieh*; *Sang-li*, p. 12, for *Sang-lin*; *Ts'un-tsiu*, p. 11, which is the same as the *Ch'un ts'iu* (*Ch'un-ch'iu*) on page 19; *le mont Heng-shan*, p. 33, is tautological, etc., etc.), but not all of them are necessarily to be blamed on the printer. The author seems at times to base himself too much on the traditional chronology; very questionable, likewise, are some of his cyclic notions on universal history. We find the author's statement somewhat obscure, when he says: « pour établir la présente traduction nous avons utilisé plusieurs textes chinois anciens et modernes dont le références sont, hélas, perdues, également les meilleures traductions accessibles (p. 57) ». On looking at the bibliography, we see cited as translations of *Lao-tzu* those by S. Julien, G. Pauthier, and L. Wieger. To have cited all the translations of *Lao-tzu* would have been too much, but since we find Aristotle, and Dante, Rabelais and Simone Weil in the bibliography, a more up-to-date sinological bibliographical information would have done no harm. On the whole, we feel this is another translation for which there is no need at all.

Lionello Lanciotti

Bruno Belpaire, *Le poète chinois Lo Pin-wang. Introduction et traduction*. (Petits traités chinois peu connus, No. 3, Bruxelles, Editions de l'Occident, 1962, pp. 155).

Lo Pin-wang, a poet and prose writer of the T'ang dynasty, lived in the second half of the 7th Century A.D. at the court of Kao-tsung. While only three books of his poems have survived, among them we find one of the finest, that dedicated to the song of the cicada for which a prisoner yearns, and which was included in the famous anthology of 300 T'ang poems (*T'ang shih san pai shou*). Bruno Belpaire now devotes another of his books to this writer. We must once again regret that the efforts of this Belgian sinologue are partially invalidated by the rather outdated bibliography he uses. The specialised reader should not have to resort to H. Giles (*Chinese biographical dictionary*), Pétillon (*Allusions littéraires*), Mayer (*Chinese reader's manual*) and Playfair (always cited only by the initials *C.T.C.*), but, obviously, to more complete Chinese manuals and anthologies; the average reader will think sinologues write in cipher so as not to be understood. From the reading of Belpaire's previous translations it is not clear whether he is addressing a general audience or that of sinologues; for the former it may be necessary to explain that a *nien-hao* is « un binome qui sert à dater un règne » (p. 9); for the latter it is superfluous to cite, as a source for some comments, the *ts'e-yuen* (*Tz'u-yüan*) Every sinologue knows that the *Tz'u-yüan* is a good dictionary, whereas the average reader is quite likely to be unaware of it. In any case, no scholar of Shakespeare or Racine would cite in his work the *Shorter Oxford Dictionary* or the *Petit Larousse Illustré*, just to mention two of our own comparable dictionaries. Nevertheless, this is the first translation into a Western language of a writer who deserves to be known and studied outside of China too, and for this we are indebted to the author. We cannot agree with him on some points of translation. For example, going back to the only poem by Lo Pin-wang included in the « 300 T'ang Poems », he translates the first two lines: « A Si-ling les crissements des cigales chantent / mais au Sud, à Koan les visiteurs pensent qu'elles exagèrent » (p. 110). But the Chinese text reads « Si-lu » and not « Si-ling » (two similar ideograms, 4067 and 4191 respectively, in Mathew's *Chinese-English Dictionary*) and therefore the two lines should be translated: « In the autumn days the cicadas sing / the imprisoned dweller thinks deeply »; *nan-kuan* is the cap of prisoners, as *si-lu* indicates the days of autumn.

The book is put out in elegant binding, but there are too many printer's errors.

Lionello Lanciotti

Monumenta Serindica - III and IV Volumes. (Hōzōkan, Kyōto, vol. III, 1960; vol. IV, 1961).

The III Volume of *Monumenta Serindica* forms the second part of the studies on « The Social and Economic System in the T'ang dynasty, according to the manuscripts found at Tun-huang and Turfan. The Chinese manuscripts which the Ōtani Expedition found in Central Asia are here examined.

1) « Chinese Official Documents of T'ang dynasty found in Central Asia » by Kenchiki Naitō.

An important essay aims at illustrating both the form of the official documents and the procedures for their drawing up. The Author takes first into consideration a group of fragments related to the Tun-huang Hsien and in particular the No. 2835 fragment, from the Ōtani Collection. This fragment is the only one to be complete and unique in its kind. The first part of the document deals with a *tieh* (message) sent by the *Tien* (clerk) of the *Kua-t'ao shih* (officer who brings back escaped people) to the Tun-huang Hsien. Its second part covers the procedure to settle the matter relating with that message. There are firstly two lines by which the province governor orders the delivery of the message to the *Szu* department. The despatch is received by the General Affairs Department (*Lu-shih szu*) and then it is transmitted to the *Szu-hu*, the Department for Civil Affairs. The *Wei*, who is in charge of this department, arranges for the matter to be examined by a *Shih* (clerk). The clerk takes the document back to his superior who adds his decision (*p'an*) which, however, must be submitted to the Governor's approval. Then the Governor's approval follows. It reads: « *i-p'an* » that is to say « according to decision ». Obviously it is the *Wei*'s decision. The last lines are written down by the *Shih* and concern with the actual fulfilment of the *p'an*.

According to the dates we find on this document all the bureaucratic procedure has been dispatched in only one day. The document is provided with the *Hsien*'s seal and is made up of a number of glued sheets. In compliance with the Chinese bureaucratic practice the signature of an official is to be found on the stickings.

The Author dwells upon another kind of documents. They are also known as *T'ieh* and are similar to the preceding ones even though they are not so formal as those.

A similar procedure is also to be found in the documents which deal with the Hsi-chou Tu-tu-fu. They are paper requests and, since the *Tu-tu-fu* had the same organization as the *Hsien*, these documents are like the preceding ones. The only difference is to be found in the fact that the requests were made by the same office which supplied the paper, that is to say the *Lu-shih szu*.

Pê-kuan's documents deal with the *Pê-kuan-ch'u* system, that is a system of state inns which were located in Hsi-chou Tu-tu-fu area. These documents cover the reimbursements of the expenses the inns met to supply *Ch'ai* (wood) and *Chiang* (soy sauce). The requests for reimbursements were sent to the *Tu-tu-fu* every day, but a certain time elapsed between every request and its respective payment: in fact the current price, which had to be requested of the *Shih-szu* — market department — to refund expenses, was fixed only every ten days. As the requests arrived they were stuck together and then they were paid at once at the *Shih-szu*'s reply.

As for the laws which regulated the drawing up of these documents the Author compares the instructions as laid down by the T'ang-lu-tien with the Japanese edicts and papers.

As regards the documents drawn up in the Kao-ch'ang Hsien, the Author thinks that an ideogram which was read as « *chi* » (finished) up to now, is rather to be read as « *Yüan* ». It would be the name of a governor.

2) « Study on Forced Labor of the T'ang dynasty » by Senshū Ogasawara and Genyū Nishimura.

The texts dealing with the forced labor cover a period of time from 678 to 767 and are mainly related to the districts of Sha-chou and Hsi-chou. The Authors divide the manuscripts into two categories the first of which regards forced labor. The other category concerns with the military service.

The manuscripts on the compulsory services of labor (a wording to be preferred to forced labor) are rather scarce. Only one deals with the *Yung* (yearly forced labor). Yet it is highly important as it gives us the opportunity of noticing that the *Yung* was discharged by a payment in kind from very recent times (679 A.D.). Other manuscripts also confirm such a custom. Other personal services could also be shunned on payment of a sum of money. As we learn from one of these writings, 1250 *wên* were needed to be relieved of a public service for half a year period.

The labor of the citizens was a state's right. Forced laborers however could get out of their duties by having themselves relieved by others. But the exemptions from forced labor on payment of a sum by laborers were not of their own free will. These exemptions had to be granted by an official.

The second part of the study deals with military service. The documents on the *wei-shih* come down to 722 A.D. approximately (10th year of K'ai-yüan). That disproves a thesis according to which the *fu-ping* had been deserting since the early K'ai-yüan era. On the contrary the system of the *fu-ping* extended over some ten years more, until it was ousted by the establishment of the *k'uo-ch'i* system (725 A.D.). According to what had been proved in the volume II of the *Monumenta Serindica*, the *Chün-t'ien* system had been practised till the end of the Kai-yüan era; the end of the *fu-ping* system has probably to be anticipated even though there are evidences of its being still in force in the early period of the Kai-yüan era.

The documents concerning with the *chün-chen* follow. They cover a pereiod of time from 684 A.D. to 767 A.D. The first group of documents deals with cavalry and it is highly interesting to notice the importance the Chinese Government attached to it in the North-West regions. In fact a lot of rights were assigned on the cavalrymen in the last period of the T'ang period from the necessity of fighting mounted barbarians.

Another group of documents covers the

locations of the armed forces. The third group deals with the treatment of the soldiers who either had deserted or gone over to the enemy.

The fourth group includes documents of civil servants on the Army.

Finally the Authors take into consideration some documents concerning with the provincial *ping-tsao*. As these documents are so fragmentary that we cannot realize their contents, they are of no avail.

3) « The Turfan Documents Relating to Transactions Law in the T'ang dinasty » by Noboru Niida.

The Author first studied a number of documents concerning with transactions which had never been examined since their finding by the Ōtani Expedition.

The A. takes first into consideration a document relating to a loan of cereals. According to him it is similar to the one which H. Maspero studied and which has been typical of such a kind of transactions. In his opinion, however, a number of points in Maspero's comments need amending.

A document which concerns with the *tsu-t'ien*, or rent of a land property, is the most interesting among the transactions the Ōtani Expedition found.

Two documents of this kind had been known until now: one dating from the fifth year of the T'ien-pao (746 A.D.), in Nakamura Library, and the other from the first year of T'ien-shou (690 A.D.), in Stein collection. According to the Author a lot of corrections are to be made to Maspero's comment upon those documents.

But many other documents concerning with the *tsu-t'ien* are to be found in the Ōtani collection. In the T'ang dynasty the *chün-t'ien* system was introduced in Turfan area, as well. But the land was divided up into shared and distant lots rather than in single ones. This is why, in Nishijima's and Nishimura's studies, farmers seemed to let a part of their lands and, on the other hand, to rent other ones. Such a state of things probably affected the transaction documents, above all in the case of land lease by either government officials or temples. According to the Author these documents do not show that personal relation between owner and tenant we find in later papers.

The so-called *i-fa-erh* provision (penalty of double amount) is a striking feature of these contracts. It was to be paid by the parties in case of their not complying with the contract. It is noteworthy that this provision concerns with an unfulfilment of both the parties; on the contrary the duties will be imposed on the only tenant later on.

A number of pawn-tickets have been found in the Ōtani documents. They were known as *t'ieh-tzu* and later as *p'iao*. They consisted of two parts: a part was printed with a blue ink which is illegible by now; the other one was handwritten. They contained a serial number, the name of the object to be put in pawn, the amount of the loan upon pledge, and the date. Probably the name of the pawshop was also indicated on the part which is illegible at present. As these pawn-tickets were payable to the bearer, they did not contain the names of those who deposited their pawns.

Seventy price lists were also found by the Ōtani Expedition: they reflect the market system in the T'ang period.

Such a system in its late developments is connected with the *hang* ones, the mediaeval guilds. Some of these *hang*'s names are also to be found on the fragments in question. The price of every item is established in three degrees; for more costly goods there are nine degrees.

Most of the T'ang laws which controlled the markets have been lost to us, but they can be reconstructed through the ones in force in Japan in the Nara age. After An Lu-shan's rebellion there was an inflation: considering their prices, therefore, the documents at issue had to be drawn up prior to such an inflation.

4) « Study of Hu-shui in the Middle of the T'ang dynasty » by Yoshiyuki Suto.

Hu-shui was a tax which was imposed on every family about the middle of the T'ang period. Some of Turfan's documents deal with such a tax and bring a lot of new elements. So we can know the way they used to collect it. The collection was performed by the *hsien-tien*, or by the *li-chêng*, or by the *yen-t'ou* who wrote the payer's name, the amount of the tax, etc. on a special document. Such a paper will develop into the *hu-ch'ao* in the Sung dynasty.

Pei-kuan's documents dating from 677 A.D. provide us with a particularly interesting piece information. They show, indeed, that the above mentioned tax was paid by wood. So far, on the contrary, we thought that it could be paid only ready money.

In the K'ai-yüan era (713 A.D.-741 A.D.) the *ta-shui-ch'ien* taxes were collected every third year and the *hsiao-shui-ch'ien* ones every year. Their proceeds were devoted to both the army expenses and public inns; the proceeds of the *hu-shui* were allotted to the officers' salaries.

As the Chou-shih-i-tsu documents point out, the *ta-shui-ch'ien* tax was suppressed in the T'ien-pao and Chih-tê eras (742 A.D.-757 A.D.); the *hu-shui* was collected twice a year, in summer and winter. This is the origin of the *liang-shui* tax.

5) « Documents related to Religious Life » by Senshū Ogasawara.

The great number of documents in the Ōtani collection which are concerned with the religious life in Central Asia can be divided into three groups according to the religions to which they are related: Buddhism, Taoism, and other religions (Manichaeism, Nestorianism, etc.). Two thirds of these documents, which total about five thousand, deal with Buddhism and on turn can also be divided into three groups of manuscripts: Buddhistic texts; confessions and prayers; other documents.

As for the Buddhistic texts the believers, in the upper classes above all, seemed to be in the habit of writing them in their own hands, out of devotion. This habit probably imported from China rather than originating in Central Asia.

In the T'ang period the flourishing of Buddhism in this area was under the influence of Chinese Buddhism so that we find a number of manuscripts which refer to the doctrine of the Pure Land (*Buddha-anusmrti*). These manuscripts were either drawn up on the place or imported from China.

As for the *Li-ch'an-wên* (confessions) and the *Ch'i-yüan-wên* (prayers) which were found in the area, the Author thinks that they are to be included in the objects that were buried together with the believers' corpses.

In the T'ang period, Turfan area was ruled directly by the T'ang dynasty through the Hsi-chou Tu-tu-fu; Buddhism was widespread over that area in Chinese ways.

Taoism also flourished together with Buddhism even though the scholars have not taken it into consideration so far. Yet the Author found a lot of documents on Taoism in the Ōtani collection.

6) « Study of the appointment order in T'ang dynasty » by Osamu Oba.

The Author considers twenty-one *Kao-shên* (Government's written orders relating to the appointments and dismissals of officials) as found at Turfan and Tun-huang.

Though hardly found in their original forms, these *Kao-shên* are of great use for the study of the bureaucratic system in the T'ang period.

7) « Study on the Tun-huang Ch'a-k'a-pu of the T'ang period » by Genyū Nishimura.

The *Ch'a-k'a-pu* was a basic document by which citizens were required to give their services, in the T'ang period. The governor of the *hsien* was charged with the drawing up of the *Ch'a-k'a-pu*.

Through a careful study of Turfan's documents the Author succeeded in reconstructing one of those *Ch'a-k'a-pu* so that he has come to know a lot of extremely interesting particulars about the social life in Turfan area.

The dating of the identified document is still a much debated question even though the Author, on the base of some officials' titles as cited in the document, is able to state that it is to be traced back to the period of time between 747 A.D. and 752 A.D.

Under the *Ch'a-k'a* system the service had to be divided among the various families according to both their ranks and the number of their *ting* (grown up people) and *ching* (minors). Yet, from an analysis of the above mentioned *Ch'a-k'a-pu*, we draw that the principle of the works' gradation was scarcely followed.

To be noticed the tendency to replace as much as possible the *po-ting* (low rank grown-ups) by the *chung-nan* (minors) in order that a higher number of grown-ups could be employed in the military service. This was rather usual in the frontier districts.

As for the family rank, the sixth is the highest one to appear in the above mentioned document. It included but a few families which probably were members of the rich landowners' class.

The IV volume of *Monumenta Serindica*, in two tomes, deals with the studies on the languages of Central Asia as performed on the manuscripts the Ōtani Expedition took to Japan.

« Buddhist Sūtras in Ancient Languages from Central Asia » is the title of its introduction by Juntaro Ishihama. Chinese, Sanskrit, Tocharian — in its two forms conventionally indicated as A Tocharian and B Tocharian, — Khotan's Saka language, Sogdian, ancient Turkish, Tibetan, Pahlevi, Mongolian, Hsi-hsia's tongue and a number of languages which were spoken in other areas (Syriac, modern

Persian, Arabic, etc.) are the languages the remains of which are to be found in Central Asia.

From a chronological point of view the Author's study includes a period between the 2nd century B.C. and the Islamizing action of the country in the 11th century. According to the Author a typically Aryan culture flourished in Central Asia in that period of time.

Most documents which have been left to us in the languages of Central Asia are religious texts and deal with Buddhism.

The Author makes a synthetical study of the texts.

The Sanskrit texts are written in Brāhmī as well as in Kharoṣṭhī scripts. The latter are more important even though they are less in numbers. The Indian texts which have been found in Central Asia can be divided into two groups: the Dhammapada's fragments, as found at Khotan, and Kroraina's manuscripts.

Then the Author hints at the many problems relative to the so-called Tocharian and lists the Buddhistic texts in Tocharian.

Khotan's Saka language cannot be considered a variety of the Tocharian; it was the current language in the southern part of the Tarim basin from the 3rd to the 11th centuries. Here the Author makes a digression to examine the spreading of the Iranian culture in Central Asia and notices that the typically Iranian three religions — Parseeism, Nestorianism and Manichaeism — were widely spread over Central Asia.

Another language was largely used in the same area: Sogdian. A language of the Iranian stock it was spoken by Sogdian people and probably was also used in political and business relations in a large area from the Caspian Sea to its borders with China. A number of documents in Sogdian language have been found both at Turfan and Tun-huang. While the documents from Tun-huang are concerned with Buddhism, the ones from Turfan are mostly related to Christianity and Manichaeism.

The Author goes on examining Buddhism among the ancient Turkish peoples and notices the large influence the Tibetan, Sogdian and Saka languages had on the Buddhistic terminology in the Turkish tongue.

Various monographs on the languages in Central Asia follow the above mentioned introduction.

1) « Descriptive Catalogue of the Sanskrit Buddhist Manuscripts brought by the Ōtani Expedition », by Ariyoshi Sanada.

The fragments of the *Saddharmapundarīka-sūtra* the Ōtani Expedition found in Central Asia are 271. The texts of the *Saddharmapundarīka-sūtra* from Central Asia are divided into two groups according to their respective scripts: texts in Calligraphic Upright Gupta Script and texts in Upright Gupta Script. All the Ōtani fragments are in Upright Gupta Script but they are subdivided into four groups according to details of their scripts.

These fragments were preserved before 1945 in a Museum in the province of Kwan-tung. After the last war, however, they were removed by Russians who entrusted them to Port Arthur Museum. Their content, therefore, has been mostly unknown and the Author could gather some information about only two fragments.

In comparison with the Nepalese ones the Ōtani manuscripts show both a strong influence of Prakrit and their preferring aorist to imperfect tenses in their verbal conjugations.

After taking into consideration five fragments relating to Sanskrit texts quite different from the *Saddharmapundarīka-sūtra*, the Author gives a list of the collection of Count Ōtani's Sanskrit manuscripts as well as a catalogue of the Buddhistic manuscripts in Ryūkoku University's library.

2) « Some Aspects of the Saddharmapundarīka-sūtra, Sanskrit Text on the Petrowsky MSS from Central Asia », by Ariyoshi Sanada and Jakuun Kiyota.

The manuscript of the *Saddharmapundarīka-sūtra*, known as Petrowsky's manuscript, was found at Kashgar towards the end of last century by Petrowsky, a Russian official in that place. At present it is preserved in the Sovietic Academy of Sciences, Institute for Oriental Studies. On the basis of microfilms they got from USSR in 1955, the Authors have completed the studies on this manuscript that Kern and Nanjo started but did not bring to a close.

The original work was composed of 459 sheets: 393 were recovered by Petrowsky, 40 by Stein, 4 by Macartney, 9 by Trinkler, and 13 are missing.

The work is likely to date from the 7th century. It is composed of 57 × 18 cm. sheets which are written in Gupta Upright Script. Every sheet includes seven lines, on either side.

The Authors' studies reach as far as Chapter X, the *Dharmabhāṇaka-parivarta*.

3) « A List of the Manuscript Remains in Uigur Script preserved in the Ryūkoku Library », by Akira Haneda and Nobuo Yamada.

This is a catalogue of the Uigur Manuscripts the Ōtani Expedition found at Turfan and Kucha. The Authors have included only manuscripts in Uigur in this list.

4) « Uigur Documents on Trade and Loan brought by Ōtani Expedition » by Nobuo Yamada.

The fragments in Uigur language also include a number of transaction documents mostly concerning with trading and loaning.

The Author illustrates two complete papers — one of which deals with the buying and selling of a land property and the other with a loan of cereals — and five fragments.

The two papers are *tamγa* that is to say they are under seal. These documents are highly interesting even though the Author merely makes out the philological meaning of the texts rather than clearing up their contents. Since the documents which deal with the loan are best illustrated in the following essay, a few notes are given here on the text of the first document relating to a buying and selling contract.

The scheme of the document is as follows: (A) Date of the contract, according to the Chinese sexagesimal system; (B) Identification of the two parties to the contract as well as its subject and motives (the formulation of the motives — a rather formalistic and stylized one — is common to every loan contract); (C) A brief account of the agreement stages. In the present case it reads as follows: « *Satïγ qoqbusïn inčä söz-läšdimiz* » (As for the amount of *qoqbu* which forms the sale price we agreed as follows) « *üč yüz biš otus qoqbuqa üsüštümüz* » (We have priced it at 325 *qoqbu*). The actual payment is then expressly mentioned by both the parties that emphatically state that they have respectively paid and received their agreed amount; (D) Description of the boundaries of the property; (E) Mentioning, through particularly emphatic words, of the actual transfer of property; the full proprietory rights of the new owner are confirmed, while the old landlord binds himself and his children to set no claims on that land: « *Bu tört šičilïγ yir üzä miη yïl tümän künkädäki Qutluγ Taš ärklig bolzun* ». (On the land delimited by these four boundaries Qutluγ Taš — the buyer — be the proprietor until the thousandth year and the ten thousandth day!) « *Taplasar öz-i tärizün* » (If he likes, he may keep it up for himself!) « *Taplamasar adïn kiši-kä ödkürü sadz-un* » (If he likes, he may transfer and sell it to others!). « *Män Yig Bürt-nüη inim icim qam qatasïm ayïtmaz-un. Isdämäz-ün* ». (Neither I, Yig Burt, — the seller — nor my younger brother, nor my elder brother, nor my children will claim, or ask for, it!); (F) Eviction guaranty: in security for eviction the penalty is fixed on a farm of a double worth; (G) Names of three witnesses (*tanuq*); (H) Identification of the document's drafter.

To be noted that the payment is stated as contextually effected the very moment the document is drawn up.

As for the fragments, one is also related to a trading contract and is rather similar to the above mentioned document; four cover loans.

5) « Study on the Uigur Documents relating to Loans of Consumption » by Masao Mori.

Two considerations have urged the Author to study these documents. Firstly on the ground that legal documents in the Uigur language have been scarcely studied by scholars as compared with religious papers, and that in general those who have taken them into consideration have just translated their texts. Secondly these documents have never been compared with the Chinese ones in order to see whether there was to be found some influence of the Chinese law upon the Uigur one. Such an investigation closely concerns the Author who tries to clear up to what extent, in the field of law studies, we may agree to von Le Coq's statement according to which « these people must, like their ancestors, be looked upon as a nation of entirely Western civilization ».

The Author's study covers the documents relating with loans of consumption goods, as money, cereals, wine, sesame seeds.

The Author divides the documents into two classes according to the kind of the loan: money or other goods. The deeds indeed vary according to either case. The two hypotheses, however, are united here for the sake of simplicity.

The deeds' elements are as follows:

(A) Date of the transaction; (B) Parties, reasons, and subject of the transaction; (C) Date of the return, and compensative interests; (D) Interests for delay in case of non-fulfilment (in case of money loan this section is missing); (E) Security formula; (F) Names of witnesses; (G) Debtor's seal; (H) Name of the drafter of the document.

The date under A) is stated according to the Chinese zodiacal system.

The section under B) is stylized: « I, Mi Tämin, needing some wine at interest (*tüškä*), borrowed half a *qab* of wine from Türi Baxšï ». The word « *tüškä* » (from « *tüš* » = = profit, fruit; here: interest + kä = the suffix to dative) means that the return of both the principal and interests should be made in the same kind of goods which have been lent. On the contrary, the formula is quite different in case of restitution of another kind of goods: « As I needed cloth instead of (*süčügkä*) sweet wine I, Turbay, borrowed one and half roll of cloth from Qïyïmtu ». In such a case the debtor had to give back sweet wine.

C) The return of all goods, money excepted, was to be made in Autumn. Obviously the restitution took place at harvest-time. This is quite similar to the Chinese system accordin to which loans are contracted in Spring and settled in Autumn. In this case the analogy with the Chinese system is complete even in the amount of the interest: in fact the debtor has to give back twice as much he borrowed.

In the case of a loan of money, on the contrary, the time of the sum's return was not fixed beforehand but it had to be established in the contract according to the debtor's needs. The amount of the interest was calculated month by month rather than once for all. Anyway it seems that it could not exceed 4 per cent. This is quite alike in the Chinese system.

D) In case of non-fulfilment the formula reads as follows: « birmädin käčürsär män il yaηïnča tüši bïrlä birürmän » (Should time go by without my redeeming the loan, I'll fulfil it together with the interest in conformity with our local customs). The Chinese documents that Pelliot and Stein found at Tun-huang also refer to local customs to fix the amount of the interests for delay. Such a reference is of a clear Chinese origin.

To be noted that the Uigur had also particular customs besides their general law.

The Author is rather puzzled about the security formula under E), that is to say about the person that must meet the obligation either on the death or in absence of the debtor. Such a formula, indeed, is also to be found in Chinese documents and, on the other hand, other peoples too, like Babylonians, Greeks, Indians, the Japanese, and the Annamite, follow such a system. The problem therefore arises, in the Uigur case, whether that system was an original one or it was introduced after the Chinese example. According to the Author we are not in a position to solve that problem through the material we presently possess.

F) Indication of witnesses' names. The names of both the parties and witnesses were shown in the margins of the Chinese documents. There were several kinds of witnesses: the *chien-chih-jen* who had to testify that the document had been drawn up in his presence, corresponds to the *tanuq* in the Uigur documents. The word « *tanuq* » which derives from the verb « *tani* » (= to advise, to seal, to recognize, to know) also corresponds etymologically to the *chien-chih-jen* and could probably be its translation. The *tanuq* appear as two in number in the Uigur documents of loan.

G) The following statement as made by the document's drafter closes the deed: « I, Qavsïdu, wrote by myself (*özüm*) ». In this case both the drafter and the debtor are the same person. In other cases, however, the deed can be drawn up by a third person: « I, Turčï, wrote at Qïrïrquš's dictation ».

The Author comes to the conclusion that the Chinese law may have exerted its influence over the Uigur law even though we have to deepen our studies to be able to give a reliable answer.

6) « Medical Literature in Tibet » by Shuki Yoshimura.

This essay is a commented translation of the fragments of the « bDud-rtsi sñiṅ-po yan-lag-brgyad-pa gsaṅ-ba man-ṅag-gi rgyud » (Profound Significance of the Eight-Element Doctrine for Longevity). Such fragments are to be found in the Tibetan library of Ryūkoku University.

The fragments cover Chapters 7, 8, 9 and 10 of Part II. The Author completes his translation with the one Podzneev published in 1908. Podzneev, however, used a Mongolian translation rather than translating the work from the Tibetan language.

The bDud-rtsi sñiṅ-po yan-lag-brgyad-pa gsaṅ-ba maṇ-ṅag-gi, which is also known as Rgyud-bshi (The Four Consequences), is the fundamental text of the Lamaistic medicine and was largely widespread over Tibet and Mongolia.

7) « Buddhist Sūtras in the Tokharian and Khotanese Saka Languages » by Taijun Inokuchi.

Tokharian was an Indo-European language which was spoken in Central Asia. It is identified by two similar dialects: A Tokharian — the usual language at Karashar and Turfan, and also known as Agni language — and B Tokharian which is spoken in Kucha area so that it is also known as Kuchean language. Te Tokharian are known as *Yüeh-chih* in Chinese texts.

Tokharian texts are written in the Brāmmī script of Central Asia. The Author gives a translation of Buddhistic texts in that language and exactly of the Kotikarṇâvadāna and the Abhidharmâvatāra-prakaraṇa.

The translation of two fragments in B Tokharian as found by the Ōtani Expedition, follows. The first fragment is an eight-line passage of Buddhastotra; the other one is a monastery-account.

Then the Author takes into consideration the Saka language of Central Asia and relates the various controversies as raised about it. After a catalogue of the texts in that language which is divided into three stages — Tumšuq language, paleo-Khotanese, and neo-Khotanese. — the Author gives us a translation of the Tathāgata-pratibimba-pratisṭhânuśaṁsā, a sūtra covering the legend of the raising of a statue to Buddha on behalf of King Udayana.

8) « Study on Hsi-hsia — its Language and Script » by Tatsuo Nishida.

The Hsi-hsia were a people that lived on the North-Western boundaries of China. In spite of their small number, they were considerably powerful in the Sung period. In 1032 A.D. they founded a kingdom that the Mongols destroyed in 1227 A.D.

The Hsi-hsia culture survived one hundred and twenty years at least, even though their kingdom had been destroyed.

The Author produces a complete essay on the Hsi-hsia script and language. The first part of his work is devoted to their script; the second part to their grammar.

The Hsi-hsia script is noteworthy since it is an ideographical one. The Hsi-hsia adopted it towards the 11th century in order to have a national script, like the Chinese one. The Ch'i-tan, another people that lived not far from the Hsi-hsia, also had their own national ideographical script. But every relation between these two scripts is to be excluded. In fact the Ch'i-tan script shows many characters that are derived from the Chinese one. The Hsi-hsia script, on the contrary, is quite an original script.

The Author dwells on both the peculiarities of this script and the way ideograms are formed. He also shows a list of ideograms as well as their reading and translation.

The second part of the work is devoted, as above mentioned, to the grammar of the Hsi-hsia language which is studied in comparison with other languages in the same group, that is to say with Tibetan and the languages of the Indo-Chinese peninsula (Thai, Shan, Burmese, Annamite, etc.).

A catalogue of Buddhistic texts in Hsi-hsia script, another catalogue of the Hsi-hsia texts to be found in the library of Ryūkoku University, and the publication of an unknown text conclude this work that the Author closes with the hope that new archeological researches in the area of the Hsi-hsia culture may throw new light on its studies.

ROMANO VULPITTA

AKIGORŌ TAGA, *Shūfo no Kenkyū*. (An Analytic Study of Chinese Genealogical Books), (Tōyō Bunko, Tōkyō 1960, pp. 3+890).

The Chinese Genealogical Books, known as *tsung-p'u*, *tsu-p'u* or *chia-p'u*, were issued by groups of Chinese families that a common male descent united. Rather than single documents of domestic relations, they are to be regarded as collections of documents concerned with the rules of the family groups. Of course they are most useful to the study of the Chinese family system and social life.

In fact they provide us with some information about their common worship, the procedures they follow to choose the head of the family, the organization of their land property, their customs of mourning and marriages, their family relief of widows, orphans, the poor, sick people and lying-in women, and lastly about their common economic system.

A number of complex rules regulated the qualifications for membership of the family group which was sanctioned by its being inscribed in genealogical books and entitled the member to his descendants' worship.

These rules apply to the age (a baby that died within three months of its birth had no right to be registered), social standing, lifelong behaviour (those who were convicted of a crime as well as adulterers, for instance, were not included), religious position (those who were converted to Christianity were not mentioned), blood-relationship, affinity, succession.

The *tsung-p'u* are characteristic of China even though they also spread over the bordering countries: *tsung-p'u*, indeed, are also to be found in Vietnam, Okinawa, Manchuria, Mongolia, as well as among Muslims in China.

The *tsung-p'u* date from remote ages. In the Sung period it was customary to engrave them on stone.

They aim at strenghtening the family groups, at furthering their evolution and guiding their organization. They try to inculcate on the family members the firm belief of their descending from a common progenitor; they strive to stir up the sense of solidarity among family members and to awaken their eagerness to fulfil meritorious deeds in order to make illustrious their families.

The contents of the *tsung-p'u* are as follows:

1) A preface the form and content of which vary according to the ages, even though it generally contains a description of the family's events, the illustration of the moral significance of the family organization, a description of the circumstances under which the preface was written down, and a number of exhortations to descendants.
2) A summary to explain the principles according to which the work was drawn up, and to make its consultation easier.
3) An index.
4) Plates illustrating descents and generations.
5) A description of the relations among the family's various branches. This section also intends to illustrate the preceding plates.
6) Grants on the part of the Court, and portraits of the ancestors. This section aims at exalting the family glories.
7) Biographies and tomb epigraphs of family members.
8) Description of temples and other places sacred to the family, beginning from the very temple where the deified founder of the family is worshipped, and instructions for their maintenance.
9) Standards of the family organization.
10) Description of family properties.
11) Description of family tombs.
12) Collection of poems and works related to the family.

A brief analysis of their contents shows the high importance of these works. Yet but a few studies have been accomplished on them so far.

The Author goes on his investigation illustrating the systems to print and arrange the *tsung-p'u*, their characteristics, their ages, and their territorial diffusion in China.

A number of catalogues take up most of the volume. The Author, indeed, has catalogued the Chinese *tsung-p'u* he collected in Japan, China, and the United States as well as the ones in Korea, Vietnam and Okinawa.

An appendix of documents on the family organization concludes the volume.

ROMANO VULPITTA

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TAGORE

Tagore Centenary Volume. Part I: The Genius of Tagore. Part II: Aspects of Indian Culture, ed. by Mahendra Kularestha, foreworded by Prof. Humayun Kabir. (Hoshiarpur, Sadhu Ashram, Vishveshvaranand V. R. Institute, 1961. Pp. xxii + 390).

« One of the most remarkable peculiarities of Rabindranath's genius is the happiness and originality with which he has absorbed the whole spirit of Vaiṣṇava poetry and turned it into something essentially the same and yet new and modern. He has given the old sweet spirit and passionate religion an expression of more delicate and complex richness voiceful of subtler and more penetratingly spiritual shades of feeling than the deep-hearted but simple early age of Bengal could know.»

That is how Srī Aurobindo described the poetry of Tagore in an essay included in the first part of this volume dedicated to the poet on the occasion of the centenary of his birth. Indeed, those who can penetrate to the roots of Tagore's poetry reach the very threshold of humanity, there where the human is sustained and nourished by the superhuman. Those roots are mystical and ascetic.

On this theme the ideas of the various authors who have collaborated in the volume develop: each gives a view arising from a particular personal contacts with the Poet's work.

The first part of the volume covers interpretations of Tagore's genius; the second part examines the motifs of the spiritual tradition which met in him and received a new vital impetus from him.

The contributors to the work include, among others: Srī Vishva Bandhu, Humayun Kabir, Srī Aurobindo, Bani Chanuduri, Charles A. Moore, Louis Renou, Swami Agehananda Bharati, K. Krishnamoorthy, Franklin Edgerton, Mulk Raj Anand, Buddhadeva Bose, P. Nagaraja Rao, Sachin Sen, R. P. Bhaskat, Balwant Gargi, Edward Thompson, Ezra Pound, A. S. Raman, etc.

MASSIMO SCALIGERO

RAMESHWAR GUPTA, *The Essential Tagore*. (Chetnagar, Banasthali, 1961. Pp. ix + 160)

The author's intention in this work is to establish the connection between Tagore's personal poetic impulse and the world of spiritual experience. The rhythm and color of the images is related to the poet's secret inner life. Rameshwar Gupta finds that in Tagore the ancient attempt to restore the original sonorities to the poetic word is revived; that inner sonority of the word which has almost always been found in attempts at expression through the plastic arts and music. Rhythm, harmony and melody can arise simultaneously in the words when it is re-experienced as primordial sonority, that is, when it is the direct manifestation of inner motion.

That is why Tagore's poetry opens the way to a new experience of the world of words and points to new paths to the art of poetry. We may say, therefore, that asceticism and poetry are born of the same inner communion. The ascetic cannot help being a poet, because of the very fact that poetry is a resonance of asceticism itself.

MASSIMO SCALIGERO

Rabindranath Tagore, A Centenary Volume 1861-1961. (New Delhi, Sahity Academy, 1961. Pp. XXV + 531).

Dedicated in memory of Tagore on the occasion of the centenary of his birth, this volume brings together contributions and testimonials, essays and memoirs which reconstruct the multi-form personality of the poet, giving the reader a chance to perceive its essential unity or universal value. An introduction by Jawaharlal Nehru and a retrospective evocation by Sarvepalli Radhakrishnan are followed by « Personal Memories » of Tagore, and then by studies and esthetic commentaries on his work, and his relation to other cultures and, in a special way, to Western culture. These are followed in turn by a number of essays setting Tagore's personality within the Indian spiritual tradition and in present-day culture. The volume ends with an account of the poet's life and an exhaustive bibliography.

Compiled under the editorship of Dr. S. Radhakrishna, the work enjoys the benefits of the collaboration of distinguished Oriental scholars and of philosophers, poets and writers known all over the world. They range from Pearl Buck to A. Keyserling, Humayun Kabir, T. Heuss, Ping Hsin, Lila Majumdar, J. Loewenbach, Kalidas Nag, L. Elmhirst, V. Brittain, Narayana Menon, S. Kramrisch, etc.

MASSIMO SCALIGERO

Celebrations in honor of Cyrus on the 25th Centenary of the foundation of the Iranian Empire

Announcement of an international competition

The Istituto Italiano per il Medio ed Estremo Oriente (IsMEO), on the occasion of the celebrations to be held in honour of Cyrus, for the 25th Centenary of the foundation of the Iranian Empire, opens a competition for an unpublished monograph, dealing with the following subject: « The conception of the Achaemenian Empire, its impact in the domain of religion, history and art: and its influence on the conception of kingship and on the structure of the State in other empires, chiefly but not exclusively in the Mediterranean world ».

This work, even if restricting itself to dealing with the illustration and solution of some particular aspects in the frame of the general subject matter, should bring a new and effective contribution to research in Iranian studies.

Monographs submitted for examination may be written in Italian, French, English or German, and should be forwarded by registered mail, in five typewritten copies, not later than December 31st, 1962, to the Istituto Italiano per il Medio ed Estremo Oriente, Roma, via Merulana 248.

The Institute shall award a prize, amounting to USA $ 3,500, to the Author whose work has won the competition, according to the decision of a specially appointed Board of Examiners, reserving to itself the faculty of publishing the said monograph.

The Board appointed by IsMEO will be constituted by five members (three Italians, and two foreign ones).

For further information, scholars that propose to take part in the competition are requested to apply to the Institute.

The President
GIUSEPPE TUCCI

Rome, January 1961

IsMEO ACTIVITIES

On April 3rd, 1962, under the auspices of the Italo-Indian Center at the Italian Institute for the Middle and Far East in Palazzo Brancaccio, Mrs. Vijaya Venkatacharya, a graduate of the Music College of Tirupati University, gave a recital of classical Indian songs. The performance was attended by a large Italian and foreign audience.

The concert was followed by a showing of documentary films in color generously provided by the Indian Embassy.

* * *

On April 10th a film on Thailand was shown at the Cine Arte film theater, in Rome. This event was organized by the Italian Institute for the Middle and Far East in collaboration with the Embassy of Thailand.

The President of IsMEO, Professor Giuseppe Tucci, spoke in appreciation of the Ambassador of Thailand in Italy, H. E. Wongsanuvatra Devakula, recalling the friendly relations which have long existed between Italy and Thailand and which the Institute works to maintain and increase. The Ambassador in turn expressed his thanks and his cordial welcome to those present.

The event was attended by the Mission Chiefs of various nations and numerous outstanding personalities of the political and cultural life of the Italian Capital.

* * *

On April 30th, at 6. p.m. at Palazzo Brancaccio, Dr. B. B. Lal of the Archaeological Department of India gave a lecture entitled "Current Archaeology in India." The event was sponsored by the Italo-Indian Culture Center of IsMEO.

The erudite lecture, which gave a comprehensive view of current archaeological researches being carried out to reconstruct ancient Indian civilization, was illustrated by slides.

* * *

On the initiative of the Italo-Indian Culture Center of IsMEO, at Palazzo Brancaccio, on Thrusday, May 3rd, 1962, Professor P. Das Gupta, Director of the Modern Art Gallery of New Delhi, delivered a lecture on the subject: "Contemporary Art in India."

This interesting presentation of the modern artistic movements in India, with their wide and varied range of inspirations, was illustrated by appropriate slides.

* * *

Under the auspices of the Italo-Japanese Culture Center at IsMEO at the Institute's headquarters, on May 9th, 1962 Professor Fujio Koyama gave a lecture on the subject: "Japanese Ceramics," amply and ably describing one of the most fascinating aspects of the artisan production of Japan. The lecture was illustrated by slides.

* * *

On May 18th, Prince Prem Purachatra, Vice-President of the Siam Society and Professor at the Chulalongkorn University of Bangkok, delivered a lecture with slides on the subject: "Contemporary Thai Culture" which met with great interest and a cordial response from the large audience.

* * *

Sponsored by the Committee for the Extension of Sinological Studies in Italy, at IsMEO in Palazzo Brancaccio, on Wednesday, May 23rd, Professor J. R. Hightower of Harvard University gave a lecture entitled: "Litterature Chinoise et Litterature Universelle," effectively setting the rich and varied body of Chinese literature within the broader framework of world literature.

* * *

Under the auspices of the Italo-Japanese Culture Center of IsMEO, on Thursday, May 24th in Rome at the C.I.D.A. Auditorium there was a showing of the film "Kyupora No Aru Machi" (Youngsters of the steel works city of Urayama Toro), an interesting documentary narrative which dealt with the main theme of more spontaneous human relations against a background of harmonious work.

On the following day, May 25th, in the same place, there was a showing of the film "Karami-al" (The inheritance) by Kobayashi Masaki, which met with great success and interest.

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